DOCUMENT RESUME

ED 265 512 CS 008 284

AUTHOR Kirsch, Irwin; Guthrie, John
TITLE Reading Practices of Adults in One High Technology Company. Reading Competencies and Practices. Technical Report #6.
INSTITUTION International Reading Association, Newark, Del.
SPONS AGENCY Army Research Inst. for the Behavioral and Social Sciences, Alexandria, Va.
PUB DATE May 83
CONTRACT MDA-90381C-0446
NOTE 102p.; Small print in appendixes.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Comparative Analysis; *Occupational Surveys; *Reading Habits; *Reading Interests; Reading Materials; *Reading Research; Reading Skills; *Recreational Reading; Technological Advancement; Time on Task
IDENTIFIERS *Job Literacy; *Job Related Reading

ABSTRACT

A reading activity inventory was administered to approximately 13% of the employees at one division of a high technology company in order to (1) assess the amount of time spent reading different content or topic areas, (2) assess the amount of time spent reading different types of materials, and (3) determine the prevailing uses for reading in terms of amount of time. The inventory was administered in two one-hour guided interviews. Three-way analyses of variance were run to address nine questions concerning the reading practices of these persons in different occupations and settings. It was found that the reading volume for specific contents, materials, and uses were each significantly influenced by the occupational categories and settings in which reading occurred. (Extensive tables and appendixes contain the reading inventory, reading profiles, statistics on the uses of reading, and types of materials read for work and leisure.) (HOD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED265512

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

REPORTS COLL
Reading Research

Reading Competencies and Practices

Reading Practices of Adults in One High Technology Company

Irwin S. Kirsch and John T. Guthrie

May 1983

Technical Report #6

The research reported herein was supported in part by the Army Research Institute Contract No. MDA 90381C 0446.

The views, opinions, and findings contained in this report are those of the author(s) and should not be construed as an official position, policy, or decision of either the Department of Defense or the International Reading Association unless so designated by other official documentation.

INTERNATIONAL READING ASSOCIATION
RALPH C. STAIGER LIBRARY

Research Department
International Reading Association
800 Barksdale Road, PO Box 8139
Newark, Delaware 19714, USA
(302) 731-1600

CS008284

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

IRA

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Overview

The contents of this report cover research activities conducted between September 1982 and May 1983. Based on conceptual frameworks previously described (Kirsch & Guthrie, 1982a; Guthrie & Kirsch, 1983), the primary activities engaged in during this period involved the development of a Reading Activity Inventory which was administered to approximately 13% of the employees at one division of a high technology company. This inventory was grounded in case studies of their employees (Kirsch & Guthrie, 1982b). It was designed to yield information that characterized individual reading practices in terms of contents, materials, and uses for reading in two 1-hour guided interviews. A total of 99 persons representing the full range of occupational categories in the company completed the inventory. Three-way analyses of variance were run to address nine questions concerning the reading practices of these persons in different occupations and settings. It was found that the reading volume for specific contents, materials, and uses were each significantly influenced by the occupational categories and settings in which reading occurred.

Reading Practices of Adults in One High Technology Company

Irwin S. Kirsch & John T. Guthrie

International Reading Association

Introduction

The concept of practice as a perspective in which to study and understand the nature of literacy has been forwarded by Scribner and Cole (1978, 1981). The practice of literacy, they argued, is not simply a set of skills associated with reading and writing; rather, it is the application of these skills for specific purposes in specific contexts. Studying reading as a practice involves gaining a better understanding into the socially organized ways in which people use reading and/or writing to accomplish specific tasks. This orientation to literacy is part of a larger trend in which scholars from various disciplines have recognized that reading, as a form of communication, is a complex activity that is conditioned by the various contexts in which it occurs.

Studies examining literacy in a variety of educational, social, and occupational settings have demonstrated a broad diversity in reading demands. People read with certain

cognitive processes but also for a variety of uses and functions (Greaney & Neuman, 1983; Heath, 1980; Mikulecky & Diehl, 1980; Scribner & Cole, 1981; Sticht, 1978). To accomplish specific goals, people interact with qualitatively different types of materials (Jacob, 1982; Mikulecky, 1982; Miller, 1982; Sticht, 1975). As these materials and uses vary, so do the cognitive strategies and behaviors of the reader (Crandall, 1981; Sticht, 1978). When frequently repeated, these behaviors are likely to result in a range of distinguishable competencies (Kirsch & Guthrie, 1983; Scribner & Cole, 1981; Sticht, 1982).

While demonstrating the complexity of reading, none of these studies has fully described the range of uses and competencies for reading. The research reported here is part of a larger effort aimed at describing the reading practices of adults in specific contexts and evaluating the competencies that may be associated with these practices. As an intermediate phase, this report explores the contents, materials, and uses for reading among a sample of adults working in one high technology company.

The first phase of this research consisted of a series of observations and interviews of persons in various occupational categories. The observation phase provided "thick descriptions" that were useful in helping to identify important variables and delineating boundaries for the contents,

materials, and uses people have for reading. During this phase of the research, certain events took on special importance and left us with impressions about adult reading practices. This information is described in a separate research report (Kirsch & Guthrie, 1982b). We were aware, however, that one of the dangers in relying on qualitative data is that the events that take on special importance and provide lasting impressions can do so even in the face of contradictory evidence (Johnson, 1978). To examine our impressions, empirical procedures were used to quantify and examine the questions that were formed.

The purposes of this report are: 1) to describe the development of a survey instrument used to quantify individual reading practices; and 2) to address questions about the variation of these practices in different occupation groups and social contexts. The following nine questions are addressed in this report:

1) What are the contents adults read?
2) How do contents vary for work and leisure?
3) How do patterns of contents read for work and leisure vary for adults in different occupations?

4) What are the materials adults read?
5) How do these materials vary across work and leisure?
6) How do patterns of materials read for work and leisure vary for adults in different occupations?

7) What are the uses adults have for reading?
8) How do these uses vary across work and leisure?
9) How do the patterns of uses of reading for work and leisure vary for adults in different occupations?

Method

Subjects

The subjects for this study were full-time employees of the Analytical Instruments Division of a Fortune 500 company. The Division's 1980 Affirmative Action Report provided information used to stratify employees in terms of sex and occupational categories. A target of 100 persons representing approximately 13% of the Division's employees was established. All employees were invited to participate in the study through published announcements in the weekly newsletter. All of the 99 employees participating in the study received remuneration for their time. A stratified listing comparing study participants with division employees is shown in Table 1. This table reveals substantial comparability in terms of sex and occupational categories.

Insert Table 1 here

Development of the Reading Activity Inventory

Studies of reading activities have addressed such questions as: who reads; what is read; and what is the frequency and time of reading. While it is relatively easy to collect data that reflect these behaviors, demonstrating the reliability and validity of these data is extremely difficult due to their sensitivity to various data collection procedures.

Researchers have experimented with a variety of procedures aimed at estimating time spent in various behaviors of interest. These include direct observations; self-report through mail or telephone; self-report through diary; open-ended interviews; interviews with aids to recall; and personal interviews with structured questionnaires. These procedures are then combined with a particular time span. Frequently, these times are natural units such as a single day, week, or month. Generally, it has been found that the shorter the period, the more complete the respondent's answer in terms of the occurrence of particular behaviors. However, the shorter the time unit the less likely the response will be representative of an individual. Evaluating these various techniques for data collection has led to the conclusion that there is no one best technique; rather understanding the various choices provides assistance in helping to choose a given procedure that may be best suited for a particular purpose (Scheuch, 1972).

Our own concerns over these issues prompted us to employ a dual strategy--case studies and personal interview with structured questionnaire. In the case study phase, we observed persons in 14 job categories over a six-month period. Each person was observed several times with each observation lasting from one to three hours. We were interested in gaining an understanding of the range of reading tasks these people

regularly performed. This included information about the contents they read, the type of material involved and the purpose or goals they had for reading a particular material. This information was used to develop the Reading Activity Inventory. Initial drafts of the inventory were administered to each person and revisions made.

Care was taken to insure that the interviewees understood the nature of the questions asked. The case studies provided the interviewer with a context from which to probe responses that seemed unclear or ambiguous. This helped insure that questions were being answered comprehensively.

Certain questions such as age, occupation, material read, and benefit of a particular reading activity were easy to ask and respondents seemed to have no trouble answering. This is consistent with other research on use of time (Szalai, 1972). The overwhelming majority of persons took an interest in talking about their reading practices and were very attentive and thoughtful in responding.

Most persons commented they hadn't thought about reading in terms of volume, but felt they could accurately judge "on average" the time they spend in leisure reading from newspapers, books, and magazines. They felt it was somewhat harder to estimate time spent reading for work because it so frequently occurred as a secondary activity. For example, technicians were observed reading schematics and looking up

information in a service manual while they were trying to repair a printed circuit board.

Reading Activity Inventory

The purposes of the Reading Activity Inventory used in this study were to 1) assess the amount of time spent reading different content or topic areas, 2) assess the amount of time spent reading different types of materials, and 3) determine the prevailing uses for reading in terms of amount of time. Consequently, the first part of the Reading Activity Inventory was intended to assess the volume of reading different contents. The second part of the Reading Activity Inventory was designed to assess volume for materials and uses simultaneously. Each part will be described separately.

Reading Activity Inventory--Part 1. Previous research by the authors had been conducted utilizing a guided interview to obtain volume of reading different contents (Guthrie & Seifert, 1982; Kirsch, 1982). Several major additions to the inventory were made to improve its accuracy based on previous findings and to represent use of computer terminals and printouts in reading activities of individuals in this population.

Two types of orientations were used to define the nature of reading and to increase the recall of reading activities for the subjects. The following introduction was read at the outset of the administration of the inventory.

"This is an inventory of your reading activities. You should think of reading as gaining meaning from written messages. Reading activities should be counted if they are the only thing you are doing; they should also be counted if you are reading while you are doing something else, such as eating a meal, resting, studying, working at a job, or traveling. Reading may occur for any length of time, from 1 minute to 1 hour or longer. We are interested in how much reading you do each month. You should include what you read at your place of residence, at your work, for school, and on the non-work days such as weekends or holidays. This inventory will cover topics read from newspapers, books, textbooks, magazines, brief documents, and computer terminals."

As each of the different sections (newspapers, books, magazines, and brief documents) was introduced, a reminder of the breadth of reading was given explicitly.

Another significant form of orientation consisted of requesting respondents to list the names of all newspapers they read. Such priming was also provided before questioning respondents on topics they read in magazines.

Following the orientation, the respondent was questioned about the frequency of reading in a number of content or topic areas. For example, one content in the newspaper consisted of local news. The subject was asked, "How often do you read the

local news?" Answers were coded by the interviewer into the categories of: Rarely (less than once a month); monthly (one to three times a month); weekly (once a week); often (two to four times a week); and daily (five or more times a week). The subject was then asked, "Each day you read this content, how much time do you spend?" The reply of the respondent was coded into six categories consisting of: 1-4 minutes, 5-9 minutes, 10-14 minutes, 15-29 minutes, 30-60 minutes, over 60 minutes (specify). By combining these quantifications of frequency and time, the number of minutes per month spent reading a particular content was obtained.

For each content, such as local news, the benefit was obtained following the assessment of frequency and time. A respondent was requested to state whether this reading occurred for the following five categories: job only; primarily job, some leisure; job and leisure equal; primarily leisure, some job; and leisure only. This permitted distinctions in reading activities in occupational and leisure settings.

CONTENTS

The contents that were used in the Reading Activity Inventory—Part 1 were comprehensive, including the following.

NEWSPAPER

News and Business included local news (state and

community), national news, international news, business/economics.

Society and Science included health/nutrition/home economics, human interest/prominent people, social problems/education, psychology (self-improvement and behavior).

Recreation included sports, travel, hobbies/games/activities.

Fiction/Viewpoint included editorials, humor (comics, cartoons, jokes), stories, reviews (book, TV, movie).

Reference included classified ads, announcements (births, deaths, weddings, community activities), TV/radio/movie listings, stock and financial listings, consumer advertising.

BOOKS

News & Business included politics/news/law, and business/economics/management.

Recreation included sports/recreation/hobbies.

Society and Science included natural science (physics, chemistry, biology, geology), social science (sociology and education), psychology (personality, emotion, behavior, self-improvement), Bible/religion/philosophy, home maintenance/improvement, health/hygiene/medicine, history/biography/geography--travel, arts (painting, music, theater), agriculture (plants and animals), engineering/construction/electrical.

Fiction and Viewpoint included literature (novels), stories, humor, drama/poetry, children's literature, and essays.

Reference included directories (dictionary, telephone book, index), manuals (how-to, repairs, cooking, office procedures, lab manuals), handbooks of information, encyclopedias, catalogues for buying.

MAGAZINES (including journals, reports and pamphlets)

News and Business included local news (state and community), national news, international news, business/economics.

Recreation included sports, travel, hobbies, games, and activities.

Society and Science included health/nutrition/home economics, human interest/prominent people, social problems/education, religion, science, psychology (self-improvement and behavior).

Fiction/Viewpoint included editorials, humor (comics, cartoons, jokes), stories, reviews (book, TV, movie, theater, arts).

Reference included classified ads, announcements (births, deaths, weddings, community activities), TV/radio/movie listings, stock and financial listings, consumer advertising.

BRIEF DOCUMENTS

This area included bills/invoices, personal letters, newsletters/bulletins, labels or addresses, notices on signs or billboards, business correspondence, memos/notes, schedules/maps, forms to fill out or read, files or records, legal documents, information for purchase (size, weight, contents), diagrams/charts, directions, computer terminals (CRT screen) or printer output.

A demographic information sheet placed at the end of the Reading Activity Inventory—Part I was used to obtain information regarding sex, place of residence, education level, occupation level, and age.

Reading Activity Inventory--Part 2. The second part which obtained information on materials and uses was based on case studies of individuals in the population to which the inventory was administered (Kirsch and Guthrie, 1982b). From these case studies, reading tasks were described. The tasks were composed of a type of material and a use for that material. These materials were first identified and placed in categories. Uses for reading were likewise derived from reports of respondents in the case studies and observations of the investigators.

MATERIALS

The materials consisted of the following:

Notice/announcement--a formal and sometimes public message

declaring some approaching or past event, often identifying a specific time or place; includes advertisements, invoices, and bills.

Label--a piece of paper, cloth, leather, etc. that is attached to some object in order to help identify or describe something; includes titles and names.

Regulation--an authoritative statement usually having the force of law which deals with the responsibilites, obligations, limitations, or liabilites between a person and an organization or other people.

Sign--a publicly displayed word, symbol, or phrase used to dictate an action.

Directions--a list of steps or procedures frequently numbered containing detailed instructions that assist with some action or operation.

Memo/note--a brief, informal written communication that is circulated to one or more persons.

Computer program--sequence of coded instructions that are inserted into an electronic mechanism in order to guide its actions in a highly specified manner.

Comics--a presentation of a series of events or actions through a sequence of pictures usually accompanied by words or phrases denoting a conversation.

Mechanical indicator--an instrument or device that is used to index or register some condition.

Prose—an ordered sequence of connected discourse varying in length and content that intends primarily to give information, relate events, or communicate ideas or opinions, including poetry.

Form--a printed document consisting of a number of typographically arranged fill-in-the-blank items where an item may consist of an abbreviation, symbol, word, sentence, or paragraph.

Table—a condensed arrangement of data, usually numbers or words in rows and columns.

Graph—a diagram displaying the variation of one variable in combination with that of one or more other variables; consisting of lines, geometric forms or figures which may contain numbers and words.

Index--an alphabetical or numbered listing of all or nearly all items or topics covered in an associated document or text which may include where these items or topics may be found.

Schematic—a technical drawing of what an object or event looks like, usually including the labeling of key parts as well as showing logical relationships or processes.

Illustration—a picture or drawing that is helpful in making something clearer or more attractive.

Technical Symbol--a character, letter, or abbreviation used in a particular subject or discipline such as mathematics, science, or computer programming.

USES

The uses of reading were described to respondents by definitions and examples.

Knowledge--Increase knowledge for self improvement; learn and remember a total body of information. Example: Read an article carefully to understand the causes of inflation and unemployment.

Information--specific--Find specific information which may be embedded in large amounts of print; locate information to satisfy a particular need. Example: Locate in a memo or notice what day the office picnic will be held.

Evaluation--Examine and judge written material; detect, correct, or revise a document or material. Example: Reread a paper or composition for spelling and grammatical errors; read several sources to write a paper; read a story for class discussion.

Keeping Abreast--To become aware of new ideas, facts, or developments; learn the gist of major topics. Example: Look over an article on the Middle East to see what the latest developments are.

Regulation--Monitor equipment or operations, gradual improvement of physical or manual skill, control or guide language behavior of self or others. Example: Read gauges on equipment to ensure it is operating safely and correctly; read over notes or outline in order to give a talk or lecture; read

a story to child.

Construction--Use language to write a paper, report, or computer program, build or make something, assemble or repair something. Example: Follow a set of instructions to assemble a bicycle.

Social Interaction--Exchange information in conversation, find out about friends, neighbors, or relatives. Example: Read the sports to talk to peers at lunch.

Excitement--Enjoy descriptions of places, events, or characters, receive stimulation through a suspenseful or adventurous story. Example: Experience stimulation from a mystery or thriller.

Relaxation--Distract from daily routine; to pass time; amusement from unusual events. Example: Read a light magazine for rest or diversion.

Affirmation--Extend or support sense of self, experience positive feelings, confirm spiritual beliefs. Example: Read the Bible to confirm moral beliefs.

Aesthetic--Appreciate use of language, enjoy the forms of literature. Example: Enjoy the sounds of language or the visual images in a writer you appreciate.

Two levels of uses were distinguished. Based on the case studies, a differentiation was made between goals and outcomes. The term goal refers to an intention that an individual holds with respect to a written document prior to

the reading activity. In the interview, we permitted subjects to select two goals, primary and secondary, for each reading activity. The term outcome refers to an unintended benefit that may occur after reading a given material. Although an individual may read a document to obtain specific information, it may have happened that the person tells another person about it and values the latter use for reading. In that case, specific information was a goal and social interaction was an outcome of reading. On some occasions, the goal was cognitive, e.g., knowledge, and the outcome was cognitive, e.g., evaluation. On other occasions a goal was affective, such as relaxation, and the outcome cognitive, e.g., keeping abreast. Frequently, behavioral goals such as regulation and construction were accompanied by cognitive outcomes such as specific information and knowledge.

Examples of the two parts of the Reading Activity Inventory are included in Appendix A. Procedures that were used in administering them are provided in the following section of this report.

Procedures

Two interviewers (one male, one female) shared responsibility in individually interviewing each of the 99 participants on two occasions. As Table 2 shows, each interviewer met with a representative sample of male and female

subjects across the four occupational categories.

Insert Table 2 here

Each interviewer received training on all facets of the Reading Activity Inventory and each conducted several pilot interviews to insure a high degree of competence and inter-interviewer agreement on the coding of responses. Using a taped pilot interview, each interviewer coded subject repsonses to Parts I and II of the Reading Activity Inventory. Agreement averaged over 95% on the coding of volume, materials, and uses for reading. All interviews were conducted at the workplace in either a conference room or a partitioned area that was free of routine distraction and noise. Subjects came to the designated area at scheduled times.

Content and volume of reading--Interview I. The first interview began with the interviewer orienting the subject to the agency conducting the research and to the general goals of the study. Individuals were asked to provide background information relating to their age, education, and occupation. When the interviewer judged the subject to be comfortable with the situation, he or she proceeded through the Reading Activity Inventory beginning with the orientation described previously. Subjects were probed several times during this first interview

regarding their responses. Frequently, the probes involved asking the subject to give specific examples of topics s/he indicated reading along with a brief description of what it was about. Sometimes probes were based on information provided during the orientation. For example, a subject might have mentioned a particular activity associated with work, such as repairing equipment, that was not mentioned during the interview. The interviewer, being familiar with the workplace and realizing that repairing equipment is frequently associated with reading manuals, might have chosen to ask the subject about this. After completing the Reading Activity Inventory, subjects were asked to bring examples of three or four materials they typically read on the job that were not proprietary and did not have to be returned. They were also scheduled for their second interviews. The second interview followed the first by a period of four to seven days.

Materials and uses of reading—Interview II. Between the first and second interview, the interviewer scored Part I of the Reading Activity Inventory for total minutes per month read in each topic. Topics (e.g., natonal news) having the highest reading volume (minutes per month) within each of the media and content categories (e.g., Newspaper/News & Business) were selected to be further described in terms of material and use during the second interview. In cases where more than one topic within a given media/content category had the same

volume, the interviewer randomly chose one. This resulted in the sampling of up to 18 high volume reading activities for each subject--five each from Newspapers, Magazines, and Books, and two or three topics from the Brief Documents section. The term volume refers to the product of frequency in days per month and time in number of minutes per day.

The second interview began with an orientation to the kinds of information that the respondent would be asked to provide. Initially, subjects were told that they would be asked about a sample of high volume activities that had been selected from their responses during the first interview. The nature of this sample was also explained to them. Next, subjects were given the list of material categories described previously and instructed to read it over. Any questions concerning distinctions among the materials were answered. Subjects were then provided the list of "uses for reading" and instructed to follow along as the interviewer read the list along with examples to them. The two levels of use--goal and outcome--were also explained to them at this time. Each person was told to be prepared to describe at least one primary goal for a given reading activity from this list. Secondary goals could also be named and primary and secondary outcomes could be named by the respondent.

The interviewer brought to the second interview a set of forms containing information about each of the sampled reading

activities as well as the material and use codes. This set of forms corresponded to Part II of the Reading Activity Inventory described previously in this report and displayed in Appendix B.

Information collected during the second interview was coded onto these forms beginning with a reliability check of each reading activity selected from the first interview. This check was obtained by asking whether the individual wished to change the frequency and time given for the activity. If a change was desired, it was entered at this stage. For the next step the respondent was asked to select the material associated with this reading activity from among the 17 listed. Following classification of the material for this reading activity, the individual was asked to state his/her use for the material. After coding the respondent's use for the material, the interviewer proceeded through the second high volume activity in the same manner. After obtaining responses to all sampled reading activities the interviewer paid the subjects and collected any sample materials they had brought with them. An informal debriefing session followed.

Data Set

Data from Parts I and II of the Reading Activity Inventory were coded into an initial data file. Data contained in this file were then aggregated into a separate file to permit more efficient processing of information relating to the nine

questions being addressed in this report. However, since this initial file contained information useful for addressing additional questions it is briefly described here. Data contained in this file were organized at the activity level. Each individual had 18 data records, one for each of the sampled high volume reading activities described previously. Each of these activities was described in terms of the following variables: a) content; b) medium; c) material; d) benefit; e) use; and f) volume (minutes per month). In addition to information pertaining to sampled reading, each record contained variables relating to total reading associated with a given content/media category (e.g., news & business/ magazine). These include total reading volume for this category as well as total volume associated with work, leisure, or some combination of the two. Background information was also coded on each record and included: age, sex, education, occupation, and area of residence.

Using SPSS, data contained in this file were aggregated into a second file to analyze the influence of occupation and context (work, leisure) on the reading practices of these adults. To assess these influences, an individual's reading volume for sampled activities was partitioned into the various content, material, and use categories for both work and leisure. Because volume in terms of minutes per month was extremely high for some activities, this estimate was converted

into minutes per day by dividing each monthly estimate by 30. It should be recalled from earlier descriptions of Parts I and II of the Reading Activity Inventory that there were 6 contents, 17 materials, and 11 uses for reading. Estimates of an individual's reading volume for work and leisure in each of the content, material, and use categories were coded into a new data base along with background information. By comparing sampled reading volume with total reading volume for each of the six contents, it was determined that the reading activities contained in this new data file represented, on average, 70% of an individual's total reading volume.

Reliability of Estimating Reading Volume

Several procedures used during the course of the interview yielded information regarding individuals' estimates of their reading volume. One procedure involved asking subjects to judge the accuracy of their responses on a subset of reading activities during their second interviews. This sample of activities reflected the high volume activities in each of the content/media categories described earlier. On average, persons were asked to judge 14 reading activities in terms of frequency and duration.

Respondents stated that these initial estimates accurately reflected their reading behaviors in 96% of the activities. Out of almost 1,400 reading activities probed over the 99 subjects, there were only 60 in which individuals chose to alter their

responses. These 60 changes in time estimated for reading activities were made by 38 out of the 99 persons participating in the study. Of these 38 people, 66% made only one change. The average change was 12 minutes per day. The overwhelming majority of these changes were to reduce the time estimated for reading. In 50 of the 60 changes people had overestimated their reading. The average change was 12 minutes per day. Interestingly, in 10 of the changes people felt they had underestimated the amount of time they spent engaged in a particular activity. As with the overestimates, individuals increased their estimates an average of 11 minutes per day.

In addition to asking people to judge the accuracy of their responses, we obtained information that related to their ability to represent their reading volume.

On several occasions, interviewers made errors in restating to the subjects their reported reading. For example, one individual said he read schematics daily for a total of 50 minutes. In questioning during the second interview, the interviewer mentioned that the person had stated reading schematics several times a week for two hours. Mismatches such as this resulted either from the interviewer copying the incorrect information from the survey or from misreading information. In all cases, the subject corrected the interviewer without any prompting. Since the two interviews were separated by a one week period it was unlikely the

subjects remembered their responses.

A second type of information provides additional evidence which relates to the accuracy of these data. A handful of respondents at the completion of the interview commented that they were unaware reading was so much a part of their day. In each case the interviewer asked the subjects during the debriefing to estimate their total reading volume for an average day. They then were asked to break this reading down into work and leisure and to estimate what materials accounted for this reading. After the subject left, the interviewer scored the survey for total reading volume, reading at work, and reading at leisure. In each case, the subjects' estimates of their reading were within 15 minutes of that obtained from scoring responses on Part I of the Reading Activity Survey.

These latter two types of information are described here for two reasons. First, even though they were not systematically obtained for each person, they provide evidence that people were not responding in random manner; rather individuals were providing honest estimates regarding their reading activities. Second, these incidental examples provide useful strategies that can be employed in future studies.

Results

The data were analyzed to address the nine questions presented at the end of the Introduction. The dependent

variable (reading volume) was the number of minutes per day spent reading (m/d); and the questions dealt with the extent to which contents, materials and uses of reading each interacted with type of job and setting to influence volume of reading. Three three-factor multiple analyses of variance were performed on the raw data. Identical analyses were performed on log transformed data since the raw data were skewed because a few individuals had extremely high volumes. Results were virtually identical, but the log results are reported since some additional significant effects were revealed by them.

Content. The influence of content on reading volume was examined with a 6 (contents) x 4 (occupations) x 2 (settings) multivariate analysis of variance. The content effect was significant, $F(5, 91) = 36.17$, $p \leq .0005$. This effect occurred because Brief Documents were read about 99 minutes per day whereas reference and fiction were read about 25-30 minutes per day and the other three areas of News/Business, Society/Science, and Recreation were read about 15-20 m/d. (See Table 3.) The main effect for occupation was not significant, but the main effect for setting was significant, $F(1,95) = 118.50$, $p \leq .0005$. The effect for setting occurred because the reading volume at work was 127 m/d which exceeded the volume at leisure which was 80 m/d.

Insert Table 3 here

Two way interactions were significant for all three variables. The interaction of content and occupation was $F(15,251) = 2.84$, $p \leq .0005$. The interaction of content and setting was $F(5,91) = 135.21$, $p \leq .0005$ (see Figure 1). The interaction of occupation and setting was $F(3,95) = 3.72$, $p \leq .01$. Interpretation of these results will not be given since the three factor interaction of content, occupation, and setting was also significant, $F(15,252) = 4.37$, $p \leq .0005$.

Insert Figure 1 here

The three factor interaction may be described in terms of how the interaction of contents and setting (work-leisure) varied across occupations. In occupation 1 (Figure 2), which consists of professionals and managers, work reading consisted of Brief Documents (75 m/d), Reference (17 m/d) and Society and Science (15 m/d). This group in leisure read mostly Fiction (35 m/d) and some News and Business (16 m/d), Society and Science (13 m/d) and Recreation (13 m/d). Occupation 2 (Figure 3) consisting of technicians and skilled workers had a different pattern. Work reading included not only Brief Documents (90 m/d), but a substantial amount of Reference reading (50 m/d). In leisure, this group read for 10-20 minutes per day in all contents except Brief Documents.

Occupation 3 (Figure 4) consists of clerks whose work reading consisted almost exclusively of Brief Documents (166 m/d). Their leisure reading included the largest amount of Fiction (42 m/d) of any group, but also the largest volumes of Society and Science (23 m/d) and News and Business (18 m/d). Occupation 4 (Figure 5) including semi-skilled and service workers was similar to occupation 2 except their Reference reading was reduced. This group read Brief Documents (98 m/d) at work and some reference (18 m/d). The leisure reading was consistently 10-20 minutes per day in all contents except Brief Documents.

Insert Figures 2-5 here

Material. The relationship between type of material and reading volume was examined with a 17 (materials) x 4 (occupations) x 2 (settings) multivariate analysis of variance. The main effect for materials was significant $F(16,80) = 82.33$, $p \leq .0005$. This resulted from the fact that prose (86 m/d), forms (29 m/d), directions (20 m/d), and schematics (12 m/d) were read more than other types of materials. (See Table 4.) As the previous analysis indicated, occupation did not have a significant effect, but setting produced an effect $F(1,95) = 5.64$, $p \leq .02$, since more reading

was done at work than leisure.

Insert Table 4 here

Several two-factor interactions were significant. Material and occupation interacted significantly. An F value for this interaction was not available since the eigenvalue problem did not converge. However, the interaction was confirmed by the fact that 7 out of 16 of the univariate F-tests for this analysis were significant at $p \leq .01$. Material and setting were significant $F(16,80) = 25.66$, $p \leq .0005$. (See Figure .) Finally, setting and occupation interacted significantly as in the previous analysis, $F(3,95) = 3.56$, $p \leq .02$. Interpretation is reserved due to the three-factor interaction.

Insert Figure 6 here

The interaction among material, occupation, and setting significantly influenced reading volume, $F(48,239) = 2.69$, $p \leq .0005$. This effect may be understood in terms of how the relationship between material and setting, as they affect reading volume, varied across occupational categories. In occupation 1 (Figure 7), professionals and managers, work reading included prose (34 m/d), computer programs (17 m/d),

schematics (12 m/d), and tables (16 m/d). Leisure reading for this group was dominated by prose (75 m/d) alone. Occupation 2 (Figure 8), technicians and skilled workers, read several materials at work, including directions (47 m/d), schematics (28 m/d), prose (25 m/d), computer programs (19 m/d) and forms (15 m/d). Their leisure reading consisted of prose (59 m/d) with a few announcements (8 m/d). Occupation 3 (Figure 9), clerks, had three prevalent materials in their work reading including forms (57 m/d), memos and notes (44 m/d) and directions (43 m/d). Their leisure reading material was mainly prose (88 m/d). Semi-skilled and service workers, occupation 4 (Figure 10), were different since they read forms (53 m/d), labels (21 m/d) and schematics (5 m/d) for work. In leisure, they read prose for 57 minutes per day.

Insert Figures 7-10 here

Use. The effect of uses of reading on reading volume was examined with an 11 (uses) x 4 (occupations) x 2 (settings) multivariate analysis of variance. The effect of use was significant. Because the eigenvalue problem failed to converge in the multivariate analysis of variance, univariate F-tests were run of which 9 out of 10 were significant at $p \leq .01$. This effect was due to the fact that high volumes of reading

occurred for specific information (56 m/d), regulation (28 m/d), relaxation (23 m/d), knowledge (24 m/d), keeping abreast (22 m/d), and evaluation (22 m/d), but relatively low volumes were observed for social interaction (1 m/d), excitement (5 m/d), and other affective uses. (See Table 5.) As in the previous analysis the main effect of occupation was not significant, but setting had an effect on reading volume $F(1, 95) = 58.63$, $p \leq .0005$.

Insert Table 5 here

The two-factor interaction of use and setting was significant $F(30,253) = 1.95$, $p \leq .003$ (Figure 11). How these three variables combined to influence reading volume is explained in terms of how use and setting interact differently across occupational groups. For occupation 1 (Figure 12), professionals and managers, specific information (50 m/d) was the prevailing use at work with construction (19 m/d), regulation, keeping abreast, evaluation, and knowledge also noted. In leisure, this group read primarily for relaxation (33 m/d), knowledge (15 m/d), and keeping abreast (13 m/d).

The uses of reading at work for occupation 2 (Figure 13), skilled and technicians, were more diverse than for occupation 1. This is the only group in which substantial reading

occurred for evaluation (52 m/d), but they also read for construction (34 m/d), specific information (32 m/d), and regulation (25 m/d). At leisure, both keeping abreast (23 m/d) and relaxation (19 m/d) had moderate volumes.

The uses of reading observed for occupation 3 (Figure 14), clerks, were striking. At work there were five prevailing uses including: specific information (53 m/d), knowledge (43 m/d), evaluation (34 m/d), regulation (26 m/d), and construction (20 m/d). For this group substantial reading volume in leisure was found for four uses led by knowledge (29 m/d) and relaxation (27 m/d), followed by keeping abreast (18 m/d) and excitement (15 m/d).

Occupation 4 (Figure 15), semi-skilled and service workers, had three main uses for reading at work: specific information (55 m/d), regulation (34 m/d), and construction (15 m/d). Their leisure reading uses consisted mainly of keeping abreast (21 m/d), relaxation (13 m/d), and knowledge (10 m/d).

Insert Figures 11-15 here

Multiplicity of uses. The data base included four possible types of uses for each reading activity: primary goal, secondary goal, primary outcome, secondary outcome. The frequencies for these uses are displayed in Table 6. Whereas

the most frequent primary goals were keeping abreast (22%) and specific information (22%), the most frequent primary outcomes were knowledge (28%) and social interaction (26%). Secondary goals were most frequently knowledge (17%), specific information (16%), keeping abreast (16%), and relaxation (14%).

Insert Table 6 here

To describe the relationships between goals and outcomes, a conditional probability analysis was conducted. (See Table 7.) When keeping abreast was the primary goal, the most frequent primary outcomes were social interaction (43%) and knowledge (32%). When specific information was the primary goal, the most frequent primary outcomes were knowledge (41%), regulation (17%), keeping abreast (16%), and construction (11%). When knowledge was the primary goal, the primary outcomes were usually social interaction (35%), keeping abreast (17%), and regulation (16%). Finally, when relaxation was the primary goal, people also derived knowledge (26%), social interaction (26%), excitement (20%), and specific information (10%) from the reading activity.

Insert Table 7 here

Discussion

The primary purpose of this study was to describe the reading practices of adults associated with one high technology company. The concept of reading practice was partitioned into three dimensions consisting of the contents or subject matters of reading, materials or formats in which the contents appear, and the uses that people have for reading these contents and materials. In addition to characterizing individual practices, it was expected that reading activities would vary according to the setting, i.e., work vs. leisure, and the occupational category of the individual. This expectation was confirmed quantitatively in the form of higher order interactions between the volume of reading and the two contextual variables of setting and occupation that were examined.

How Do Contents Read Vary Across Work and Leisure?

The contents of reading for this population were dramatically different in work and leisure settings. In the occupational context, brief documents predominated, being read for about 97 minutes per day on the average. Next, reference reading was moderate at 24 minutes per day. The other topics were read at low volumes. In contrast, leisure reading in the areas of news and business, science and society, recreation, and fiction was consistently moderate, about 14 to 26 minutes per day. In leisure, brief documents and reference reading activities were low, about 1 to 9 minutes per day. It is clear

that context influences choice of content since the topics read in one setting were almost completely ignored in the other environment.

How Do Patterns of Contents in Work and Leisure Vary for Adults in Different Occupations?

Although all occupations showed different patterns of reading in work and leisure, the nature of the patterns varied in different occupational categories. Professionals and managers spent more time reading society and science and less time reading brief documents at work than the average. In addition, these professionals and managers read more fiction in leisure than the average.

Individuals who were skilled workers or technicians performed more reference reading at work than the average. Their mean was 51 minutes per day whereas the general mean was 24 minutes per day. The other contents at work and leisure were read similarly for this group as for the whole group of respondents.

Individuals who occupied clerical positions read more brief documents than the average. This group read 166 minutes per day in this category whereas the average was 97 minutes per day. In addition, they read less reference than the group as a whole. Clerical workers read more fiction than average spending 42 minutes per day in this domain as compared to a group mean of 26 minutes per day.

Individuals who occupied semi-skilled or service positions as a group read in similar volumes for both work and leisure to the group as a whole. Although they read less fiction, spending 13 minutes per day rather than 26 minutes per day in this area, other contents at both work and leisure were read with volumes similar to the average. This is an interesting finding suggesting that semi-skilled and service workers read a moderate amount in a broad range of contents for leisure whereas other occupation groups read relatively high or relatively low volumes in these contents. Likewise at work, whereas other groups have relatively higher or lower volumes in brief document reading, this group reads about the average level.

What are the Materials Adults Read for Work and Leisure?

Materials were expected to be read with differential volume at work and leisure and to vary with occupational category. In general, one category of material, prose, dominated leisure reading. For the total sample about 67 minutes a day were spent reading prose in leisure, whereas only one of the 16 other material categories was read more than a couple of minutes per day, i.e., notices and announcements were read 6 minutes per day. At work, three types of materials were read moderately. Forms were read 29 minutes per day; prose was read 19 minutes per day; directions were read 18 minutes per day. Several additional areas were read from 7 to 12 minutes per day

including: notices, labels, memos/notes, computer programs, tables, and schematics. The other categories were read for low volumes.

How Do the Patterns of Materials Adults Read for Work and Leisure Vary in Different Occupations?

Occupational variations in this pattern of material reading occurred infrequently for leisure settings. The only differences were that managers/professionals and clerks both read prose about 80 minutes per day while technicians and semi-skilled/service workers both read fiction about 58 minutes per day.

Occupational groups deviated from the average in their work reading. Professionals and managers read a higher volume of prose and a much lower volume in forms than the average. Technicians and skilled workers read substantially higher volumes of directions and schematics than the average while a relatively lower volume of forms. Clerks had the highest volume of work reading which was composed of higher volumes of forms, a high volume of memos and notes, and a high volume of directions. Except for labels and tables, which were read about 10 minutes per day, other volumes were relatively low. Semi-skilled and service workers were similar to the average except they read high volumes of labels (21 minutes per day) and notices (15 minutes per day). The remainder of their reading consisted exclusively of forms which were read about 53

minutes per day.

What Are the Uses for Reading in Work and Leisure Settings?

Uses for reading were distinctive in work and leisure settings. At work, reading for specific information dominated all others, occurring for 48 minutes per day. Specific information was derived from a wide variety of materials including training manuals, books on natural science, memos, business correspondence, diagrams, and labels.

Three uses for reading at work were moderate in strength. Regulation consisted of reading manuals, handbooks of electrical components, or bills and invoices in such a way as to regulate behavior. Reading for evaluation occurred 21 minutes a day and was most frequently associated with schematics, diagrams, and business correspondence. Finally, the use of construction which occurred for 21 minutes per day was reported during the reading of computer programs, time schedules, diagrams, manuscripts, and forms.

Three uses for reading prevailed in leisure time. These were relaxation which occurred 23 minutes per day on the average, keeping abreast for 19 m/d, and knowledge for 14 minutes per day. Relaxation frequently was reported for fiction in the form of novels or stories, but also occurred for news in magazines, sports in the newspaper, and hobby magazines. Keeping abreast was frequently reported during the reading of local, national, and international news in a

newspaper or magazine. Knowledge acquistion was reported for a broad range of materials including science articles in the newspaper, books on politics, medical handbooks, dictionary, and travel magazines.

How Do Patterns of Uses of Reading for Work and Leisure Vary for Adults in Different Occupations?

Different occupation groups varied from the patterns described in the previous section. Professionals and managers read for uses in volumes that were similar to the group as a whole except that they read for evaluation and regulation in lower volumes. In leisure, reading for relaxation was slightly higher for managers/professionals than the average, reaching 33 minutes per day compared to 23 minutes per day for the total sample. The most frequently named content for this group was novels and stories in magazines which were read for relaxation.

Technicians and skilled workers were distinct from other groups. First, the largest volume of use occurred for evaluation which was 52 minutes per day compared to the sample average of 21 minutes per day. Evaluation occurred most frequently for this group in the reading of schematics which were read while examining, repairing, and testing equipment. This group read for the goal of construction more than other occupational groups. In addition, this group read for specific information in books on electronics, operating manuals, and forms. The use of regulation also occurred with relatively

high volume of 25 minutes per day for handbooks and manuals. Leisure reading among this group did not deviate markedly from the average for the total sample.

Clerks who formed the third occupation group read for a larger number of high volume uses than the average. At work, this group reported reading for the goal of knowledge for 43 minutes per day which is substantially higher than the average of 9 minutes per day. Knowledge was a frequent goal when reading memos/notes and computerized directions and manuals. In addition, clerks read for higher volumes of specific information, evaluation, regulation, and construction than average. In leisure reading, clerks were distinct from the general pattern by reading more for knowledge, 29 minutes per day, than the average of 14 minutes per day. They reported this to occur for local news in the paper, books on plants, articles on health in newspapers and magazines. In addition, clerks reported reading for excitement more than the average. Their mean was 15 minutes per day as compared to the average of 5 minutes per day. Materials frequently associated with this use included fictional stories, human interest articles, and features in fashion magazines.

Semi-skilled and service employees are distinguished from the other groups by their relatively high reading for the use of regulation. This occurred at work for an average of 34 minutes per day as compared to 24 minutes per day. Regulation

occurred for the reading of computer files, bills and invoices, directories, and manuals. In addition, this group read at work for specific information (55 minutes per day) in computer records, diagrams and charts, manuals and other books of procedures. Leisure reading for this group was slightly different because keeping abreast was the highest volume use occurring for 21 minutes per day. They reported reading for this purpose in newspapers and newsletters. Other uses were similar to the sample as a whole including relaxation which occurred for stories in Readers' Digest, sports in the newspaper, and hobby magazines. The uses of knowledge, specific information, and regulation occurred with moderate volumes (8-10 m/d) in leisure time.

Multiplicity of uses should be emphasized. Out of 1,393 reading activities for which a primary use was given, secondary uses were reported for 607 activities. In other words, 44% of reading activities had at least two goals. In addition to the goals, outcomes occurred for 475 or 34% of the reading activities. Frequent combinations of goals and outcomes occurred with the following examples. Specific information was a frequent goal for reading manuals, but knowledge was an often reported outcome. Keeping abreast was a frequent goal for reading social problems in the newspaper but knowledge was often reported as an outcome; articles in magazines were often read for the purpose of keeping abreast with the outcome of

social interaction. Relaxation was often reported as a primary use for sports magazines or newspaper articles with knowledge being acquired incidentally and social interaction resulting as a valued benefit. The predominance of multiplicity in reading uses warrants attention in future studies.

Within one high technology company the reading practices of a representative sample of individuals have been quantified and described in terms of contents, materials, and uses. The nine questions presented in the introduction have been addressed with initial answers provided. The significance of these practices as revealed by the data presented is remarkable. Implications are striking for the psychology of reading, adult education, curriculum theory, educational competency testing, and communication training in occupational settings.

A full treatment of the issues in these areas that are addressed by the findings from this study will not be attempted here. Future articles based on these results, however, will discuss the theoretical and practical ramifications of conclusions that may be derived from these data.

References

Crandall, J. Functional literacy of clerical workers: Strategies for minimizing literacy demands and maximizing available information. Paper presented at the annual meeting of the American Association for Applied Linguistics, New York, December, 1981.

Greaney, V., & Neuman, S. Exploring the functions of reading: A cross-cultural perspective. Paper presented at the annual meeting of the International Reading Association, Anaheim, 1983.

Guthrie, J.T., & Kirsch, I.S. The emergent perspective on literacy. Manuscript submitted for publication, Spring 1983.

Guthrie, J.T. & Seifert, M. Contents and volumes of reading activities in occupational and educational groups. Paper presented at the annual meeting of the American Educational Research Association, Montreal, 1983.

Heath, S.B. The functions and uses of literacy. Journal of Communication, 1980, 30(1), 123-133.

Jacob, E. Literacy on the job: Final report of the ethnographic component of the industrial literacy project. Washington, DC: Center for Applied Linguistics, June 1982.

Johnson, A.W. Quantification in cultural anthropology. California: Stanford University Press, 1978.

Kirsch, I.S. Competencies and uses of reading: An exploratory investigation. Unpublished doctoral dissertation, University of Delaware, 1982.

Kirsch, I.S., & Guthrie, J.T. Prose comprehension and text search as a function of reading volume. Manuscript submitted for publication, Spring 1983.

Kirsch, I.S., & Guthrie, J.T. Conceptual foundations for competencies and practices of reading. Technical Report #1, International Reading Association, March, 1982a.

Kirsch, I.S., & Guthrie, J.T. Case studies of reading in a high technology corporation. Technical Report #2, International Reading Association, August, 1982b.

Mikulecky, L. Job literacy: The relationship between school preparation and workplace actuality. Reading Research Quarterly, 1982, 17 (3), 400-419.

Mikulecky, L., & Diehl, W. Job literacy: A study of literacy demands, attitudes, and strategies in a cross-section of occupations, Bloomington, Indiana: Reading Research Center, Indiana University, 1980.

Miller, P. Reading demands in a high-technology industry. Journal of Reading, 1982, 26(2), 109-115.

Scheuch, E.K. The time-budget interview. In A. Szalai (Ed.), The use of time. The Hague: Mouton, 1972.

Scribner, S., & Cole, M. Literacy without schooling: Testing for intellectual effects. Harvard Educational Review, 1978, 48, 448-461.

Scribner, S. & Cole, M. The psychology of literacy. Cambridge, Mass.: Harvard University Press, 1981.

Sticht, T. Literacy and vocational competence. (Occasional paper no. 39, National Center for Research in Vocational Education.) Columbus: Ohio State University, 1978.

Sticht, T. Evaluation of the "reading potential" concept for marginally literate adults. Human Resources Research Organization, January 1982, Final Report FR-ETSD-82-2.

Sticht, T. (Ed.) Reading for working: A functional literacy anthology. Alexandria, Va.: Human Resources Research Organization, 1975.

Szalai, A. (Ed.) The use of time. The Hague: Mouton, 1972.

READING COMPETENCIES AND PRACTICES

Technical Reports

Kirsch, I., & Guthrie, J. Conceptual foundations for competencies and practices of reading. Technical Report #1, March, 1982, International Reading Association.

Kirsch, I., & Guthrie, J. Case studies of reading in a high technology corporation. Technical Report #2, August, 1982. International Reading Association.

Kirsch, I., & Guthrie, J. Prose comprehension and text search as a function of reading volume. Technical Report #3, August, 1982, International Reading Association.

Guthrie, J., & Seifert, M. Profiles of reading acitivity in a community. Technical Report #4. October, 1982, International Reading Association.

Guthrie, J.T., & Kirsch, I.S. What is literacy in the united states? Technical Report #5. February, 1983, International Reading Association.

Kirsch, I.S., & Guthrie, J.T. Reading practices of adults in one high technology company. Technical Report #6. May, 1983, International Reading Association.

Table 1

COMPARISON OF EMPLOYEES SAMPLED FROM ONE DIVISION OF THE COMPANY IN TERMS OF OCCUPATIONAL CATEGORY & SEX

	SAMPLE (n=99) %	DIVISION (n=793)* %
OCCUPATION		
Managers/Professionals	33	37
Technicians/Skilled	20	23
Clerical	12	9
Semi-skilled/Service	34	32
SEX		
Males	67	65
Females	32	35

*Percentage of employees is based on the division's 1980 Affirmative Action Report.

Table 2

DISTRIBUTION OF COMPLETED INTERVIEWS
BY INTERVIEWER, RESPONDENT'S SEX, & OCCUPATION

	Interviewer 1		Interviewer 2		Total
	M	F	M	F	
Managers/Professionals	11	3	13	6	33
Technicians/Skilled	7	2	9	2	20
Clerical	-	5	1	6	12
Semi-skilled/Service	8	3	18	5	34
TOTAL	26	13	41	19	99

Table 3

CONTENTS OF READING FOR WORK AND LEISURE
BY FOUR OCCUPATION GROUPS

	WORK					LEISURE					
	OCC 1*	OCC 2	OCC 3	OCC 4	Subtotal Work	OCC 1	OCC 2	OCC 3	OCC 4	Subtotal Leisure	Total
News & Business	1.6 (5.4)	0	0	0	.53 (3.2)	16.4 (12.3)	14.6 (13.5)	17.5 (9.9)	13.2 (14.6)	15.1 (13.2)	15.8 (14.5)
Society & Science	15.0 (20.9)	3.8 (8.9)	1.0 (3.3)	.3 (2.8)	6.1 (14.3)	13.2 (15.7)	11.1 (10.4)	23.0 (14.9)	14.5 (12.5)	14.4 (13.8)	20.5 (17.8)
Recreation	0	0	0	0	0	13.2 (13.2)	13.8 (12.9)	7.1 (6.8)	17.8 (21.4)	14.5 (16.0)	14.5 (16.0)
Fiction & Viewpoint	.1 (.4)	0	0	0	.02 (.22)	33.4 (31.3)	21.0 (24.4)	41.8 (34.9)	13.4 (14.2)	25.8 (27.6)	25.8 (27 .6)
Reference	17.4 (41.7)	50.5 (86.3)	9.1 (14.1)	17.5 (44.4)	23.5 (54.5)	6.6 (7.3)	9.8 (8.7)	10.8 (9.0)	9.9 (6.9)	8.9 (8.3)	32.3 (34.9)
Brief Documents	74.9 (64.3)	90.5 (74.4)	166.5 (142.3)	98.2 (103.7)	97.1 (93.0)	.9 (3.5)	1.6 (3.6)	1.3 (4.3)	2.3 (4.5)	1.6 (3.9)	98.7 (94.3)
					127.2 (104.4)					80.3 (43.5)	

Note: Numbers are minutes per day including means and standard deviations in parentheses.

*OCC 1—Managers/Professionals
OCC 2—Technicians/Skilled
OCC 3—Clerical
OCC 4—Semi-Skilled/Service

BEST COPY AVAILABLE

TABLE 4

MATERIALS READ FOR WORK AND LEISURE
BY FOUR OCCUPATION GROUPS

MEANS/STANDARD DEVIATIONS

	WORK					LEISURE					
	Occ 1	Occ 2	Occ 3	Occ 4	Subtotal Work	Occ 1	Occ 2	Occ 3	Occ 4	Subtotal Leisure	Total
Notice/ Announcement	3.8 (7.9)	3.2 (8.4)	3.3 (11.5)	13.0 (48.5)	7.4 (29.1)	4.3 (8.2)	7.7 (7.1)	7.7 (8.9)	6.4 (7.4)	6.1 (7.8)	13.5 (30.4)
Label	1.4 (3.8)	.05 (.2)	9.2 (23.9)	21.4 (51.8)	8.7 (32.3)	.1 (.3)	.1 (.7)	1.3 (4.3)	1.0 (3.2)	.5 (2.4)	9.2 (32.5)
Regulation	3.1 (13.4)	0	.6 (2.0)	1.8 (10.4)	1.7 (9.8)	.3 (1.6)	0	0	0	.1 (.9)	1.8 (9.8)
Sign	0	0	0	0	0	0	0	0	.5 (2.6)	.2 (1.5)	.2 (1.5)
Directions	4.3 (14.8)	46.5 (91.3)	43.0 (138.0)	4.3 (14.9)	18.0 (66.0)	3.0 (10.3)	2.1 (5.6)	.8 (2.6)	.2 (.6)	1.6 (6.6)	19.6 (66.3)
Memo/Note	8.3 (18.5)	0	44.2 (68.3)	0	8.1 (28.8)	0	0	0	.03 (.2)	.01 (.1)	8.1 (28.8)
Computer Program	17.0 (49.7)	18.8 (41.0)	0	0	9.7 (35.1)	0	0	0	0	0	9.6 (35.1)
Cousins	0	0	0	0	0	1.0 (1.6)	1.1 (2.4)	1.9 (4.6)	.8 (2.1)	1.1 (2.3)	1.1 (2.4)
Mathematical Indicator	0	0	0	0	0	0	0	0	0	0	0
Prose	34.0 (50.0)	25.2 (40.0)	5.7 (14.0)	4.3 (10.1)	18.8 (42.3)	74.7 (37.2)	39.2 (41.2)	88.1 (30.5)	36.6 (40.3)	67.0 (39.4)	85.7 (57.3)
Form	3.7 (14.3)	15.4 (30.8)	57.1 (68.5)	33.1 (79.1)	29.1 (58.1)	0	.1 (.2)	0	.03 (.2)	.02 (.1)	29.1 (58.1)
Table	16.1 (41.7)	4.0 (9.4)	9.8 (23.7)	4.6 (16.8)	8.9 (27.7)	1.0 (3.0)	2.5 (6.9)	.8 (2.3)	1.2 (3.6)	1.4 (4.2)	10.3 (28.2)
Graph	2.2 (11.2)	0	0	.2 (.9)	.8 (6.5)	0	0	0	0	0	.8 (6.5)
Index	1.9 (7.4)	0	3.6 (8.7)	6.3 (34.8)	3.1 (20.7)	1.2 (5.2)	.8 (2.0)	.3 (1.4)	2.8 (4.3)	1.6 (4.1)	4.8 (21.3)
Schematic	12.3 (25.1)	27.9 (68.6)	0	5.3 (16.5)	11.8 (36.6)	0	.2 (1.0)	0	0	.05 (.3)	11.8 (36.6)
Illustration	.9 (5.2)	3.8 (17.5)	0	0	1.1 (8.5)	.2 (.8)	0	0	0	.1 (.4)	1.2 (8.6)
Technical symbol	0	0	0	0	0	0	0	0	1.6 (6.8)	.5 (2.9)	.5 (2.9)
					127.2 (104.4)					80.2 (43.3)	

Note: Numbers are minutes per day including means and standard deviations in parentheses.

BEST COPY AVAILABLE

TABLE 5

USES OF READING FOR WORK AND LEISURE
BY FOUR OCCUPATIONAL GROUPS

	WORK					LEISURE					
	Occ 1	Occ 2	Occ 3	Occ 4	Subtotal Work	Occ 1	Occ 2	Occ 3	Occ 4	Subtotal Leisure	Total
Knowledge	9.0 (14.7)	1.5 (6.5)	42.5 (147.2)	2.4 (8.0)	9.3 (51.9)	14.6 (17.5)	11.9 (15.5)	28.7 (19.8)	10.0 (11.5)	14.2 (16.4)	23.5 (59.1)
Specific Information	30.4 (63.3)	31.6 (42.1)	53.3 (81.0)	34.9 (93.9)	48.2 (73.2)	9.2 (17.5)	9.2 (11.5)	4.2 (5.5)	8.0 (9.6)	8.2 (12.8)	56.4 (73.6)
Evaluation	8.1 (21.1)	32.2 (88.6)	34.0 (70.1)	9.7 (28.3)	21.1 (53.7)	2.3 (6.0)	.1 (.3)	.4 (1.4)	.9 (2.8)	1.1 (3.9)	22.3 (53.9)
Keeping Abreast	9.7 (16.9)	1.3 (4.9)	0	.5 (2.6)	3.7 (10.9)	13.4 (13.2)	23.1 (23.4)	17.8 (14.0)	21.1 (23.0)	18.6 (19.4)	22.3 (21.6)
Regulation	12.4 (28.4)	24.5 (51.0)	26.3 (46.2)	33.6 (78.6)	23.7 (55.9)	.6 (1.9)	4.0 (7.9)	3.2 (5.8)	8.6 (12.3	4.3 (8.8)	28.0 (58.3)
Constructive	19.3 (30.6)	33.7 (72.3)	20.4 (46.9)	15.1 (49.4)	21.1 (54.7)	1.8 (6.1)	1.7 (5.4)	.8 (2.6)	2.3 (10.5)	1.8 (7.4)	22.9 (57.0)
Social Interaction	0	0	0	0	0	1.0 (3.4)	.9 (2.2)	.1 (.3)	1.7 (5.3)	1.1 (3.8)	1.1 (3.8)
Excitement	0	0	0	0	0	5.5 (15.0)	2.3 (5.4)	15.0 (29.0)	2.6 (5.9)	5.0 (14.2)	5.0 (14.2)
Relaxation	0	0	0	0	0	33.2 (39.2)	19.4 (29.9)	26.6 (33.5)	13.2 (20.7)	22.8 (32.0)	22.8 (32.0)
Affirmation	0	0	0	0	0	2.3 (7.3)	1.1 (3.3)	4.4 (12.5)	1.9 (4.4)	2.2 (6.7)	2.2 (6.7)
Aesthetic	0	0	0	0	0	2.0 (10.4)	0	.2 (.6)	1.0 (4.1)	1.0 (6.5)	1.0 (6.5)
					127.2 (104.6)					80.2 (43.5)	

Note: Numbers are minutes per day including means and standard deviations in parentheses.

BEST COPY AVAILABLE

Table 6

RANK ORDER OF FIVE MOST FREQUENT USES FOR READING ACROSS OCCUPATIONS AND SETTINGS

Primary Goal	%	Primary Outcome	%
Keeping Abreast	22	Knowledge	28
Specific Information	22	Social Interaction	26
Knowledge	18	Regulation	11
Relaxation	16	Keeping Abreast	8
Regulation	7	Excitement	7

Secondary Goal	%	Secondary Outcome	%
Knowledge	17	Social Interaction	20
Specific Information	16	Excitement	17
Keeping Abreast	16	Relaxation	17
Relaxation	14	Keeping Abreast	14
Regulation	8	Knowledge	8

Table 7

RANK ORDER OF OUTCOMES ASSOCIATED WITH
FREQUENTLY OCCURRING GOALS

Primary Outcome	Primary Goal: Keeping Abreast(27%)	Specific Information(20%)	Knowledge(17%)	Relaxation(16%)
	Social Interaction(43%) Knowledge(32%) Relaxation(10%) Regulation(8%)	Knowledge(41%) Regulation(17%) Keeping Abreast (16%) Construction(11%)	Social Interaction(35%) Keeping Abreast (17%) Regulation(16%) Affirmation(10%)	Knowledge(26%) Social Interaction(26%) Excitement(21%) Specific Information(10%)

Figure 1

Contents Read for Work & Leisure

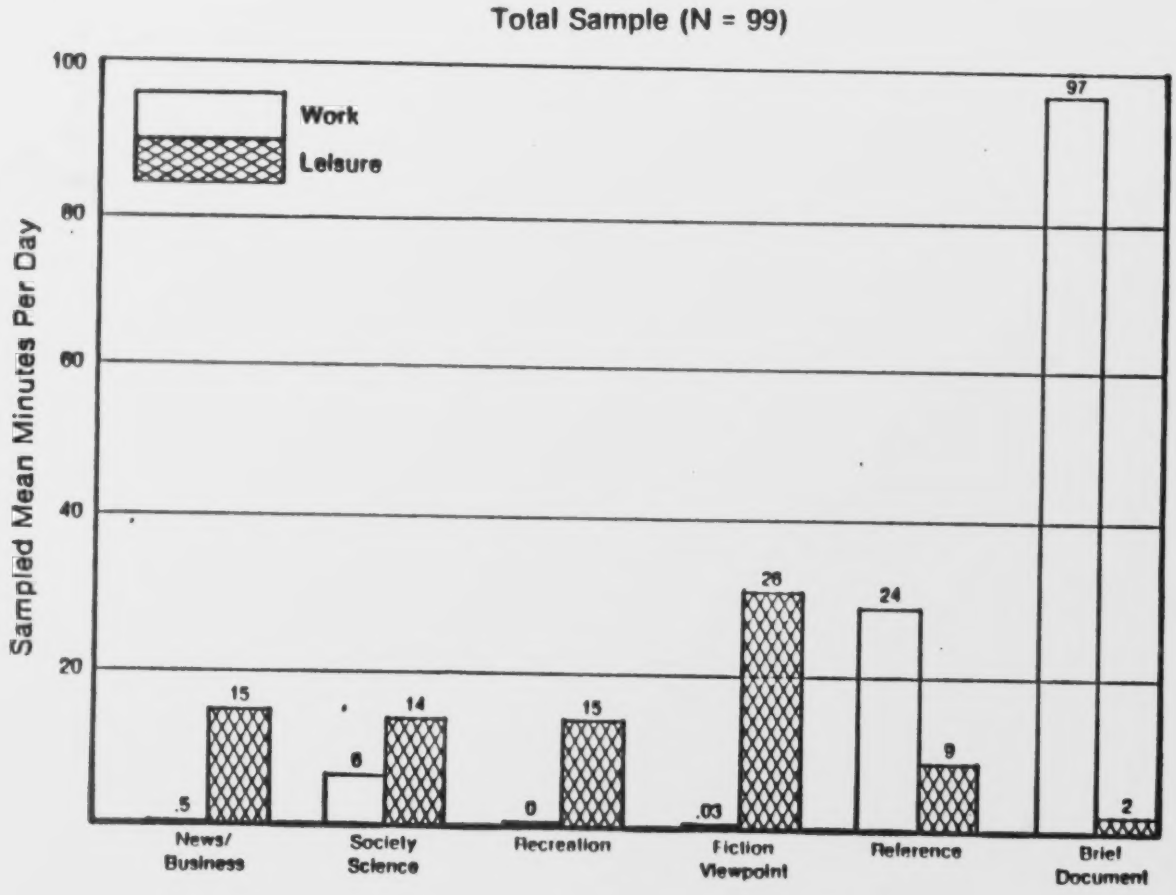


Figure 2

Contents Read for Work & Leisure

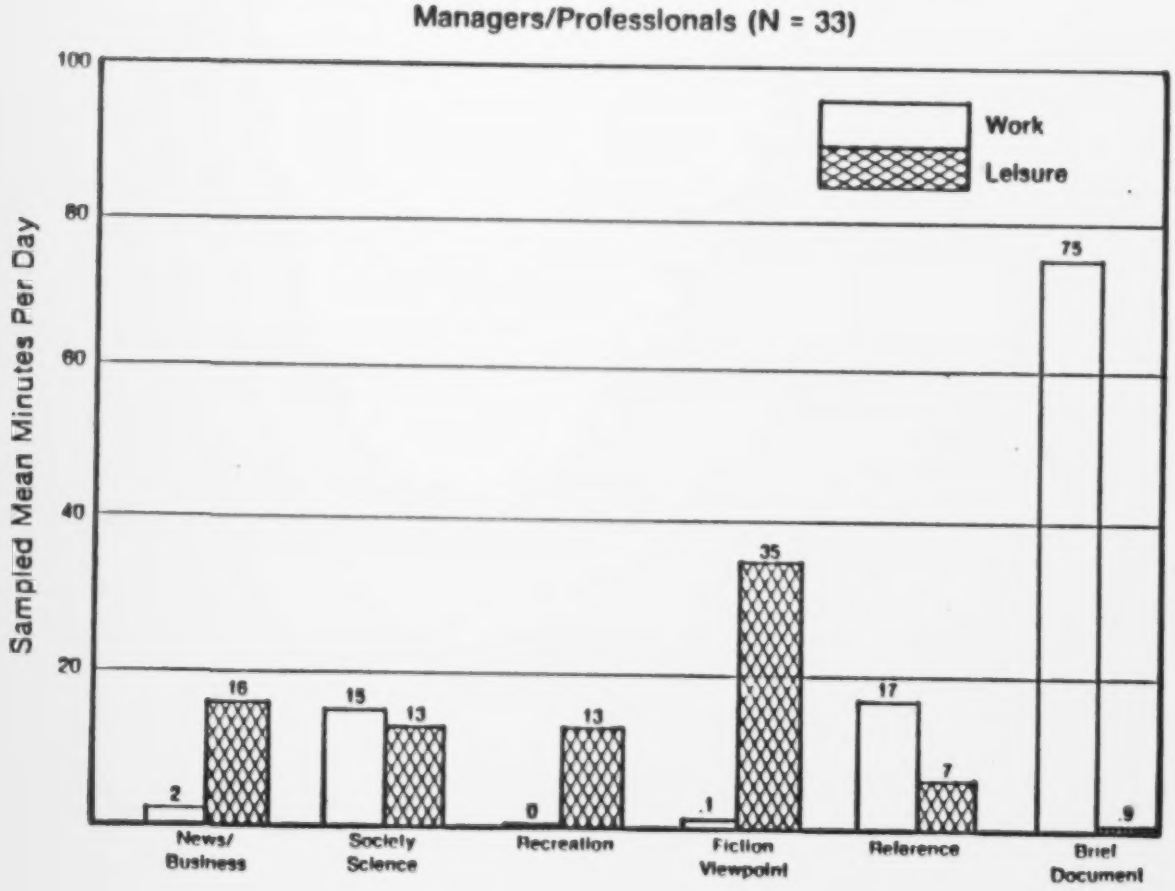


Figure 3

Contents Read for Work & Leisure

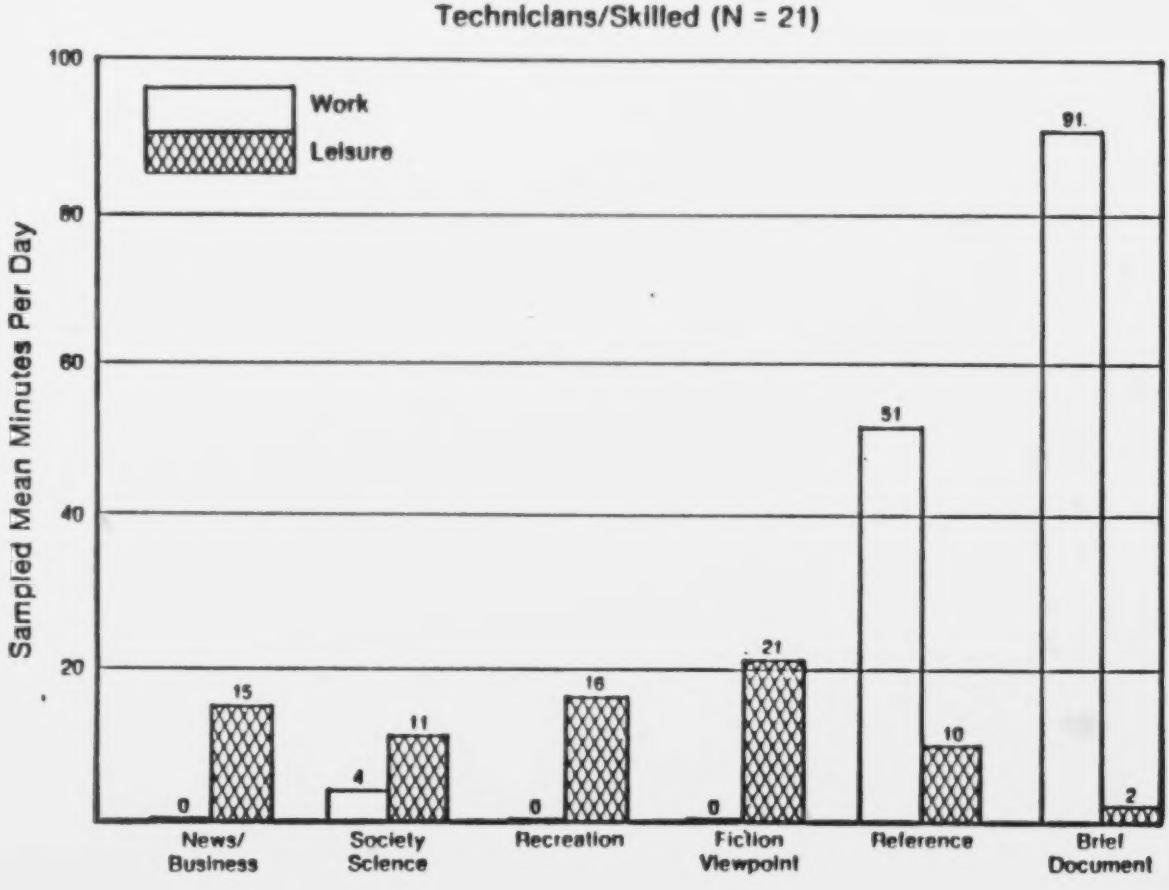


Figure 4

Contents Read for Work & Leisure

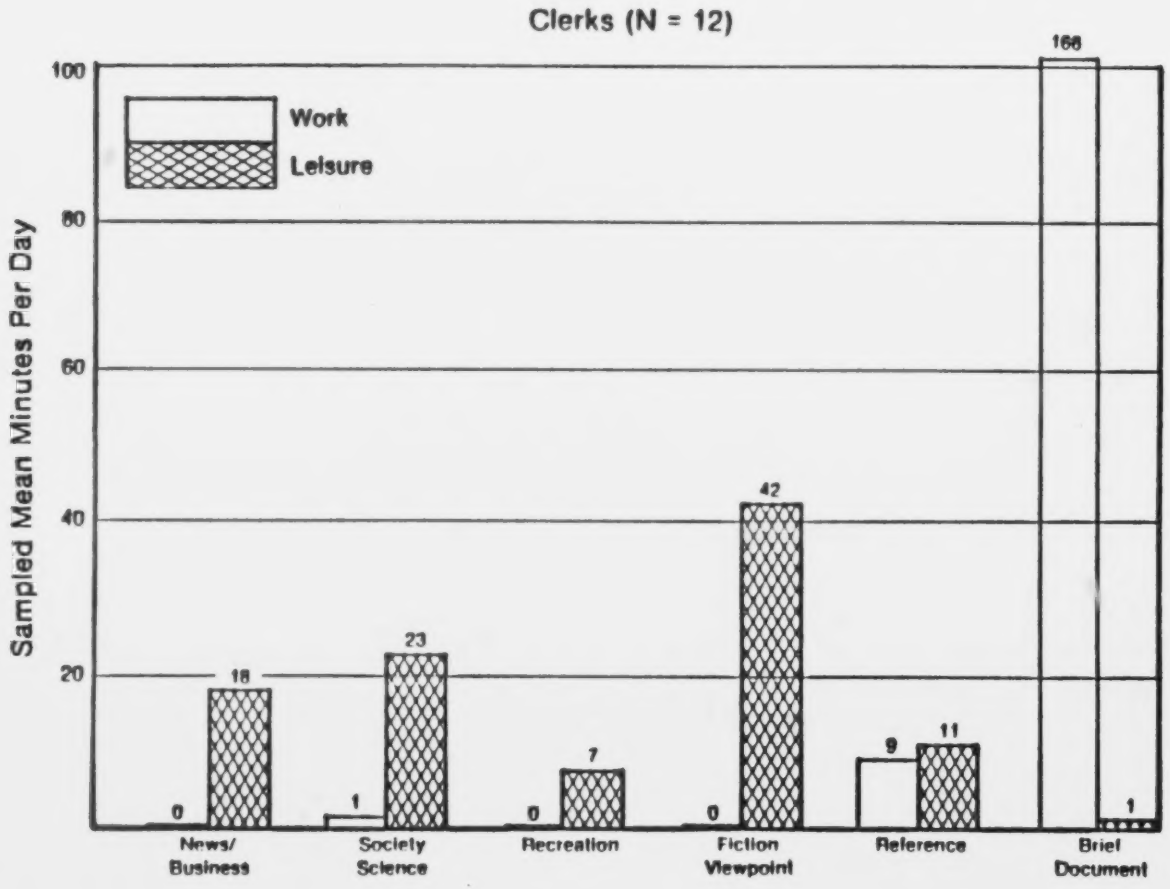


Figure 5

Contents Read for Work & Leisure

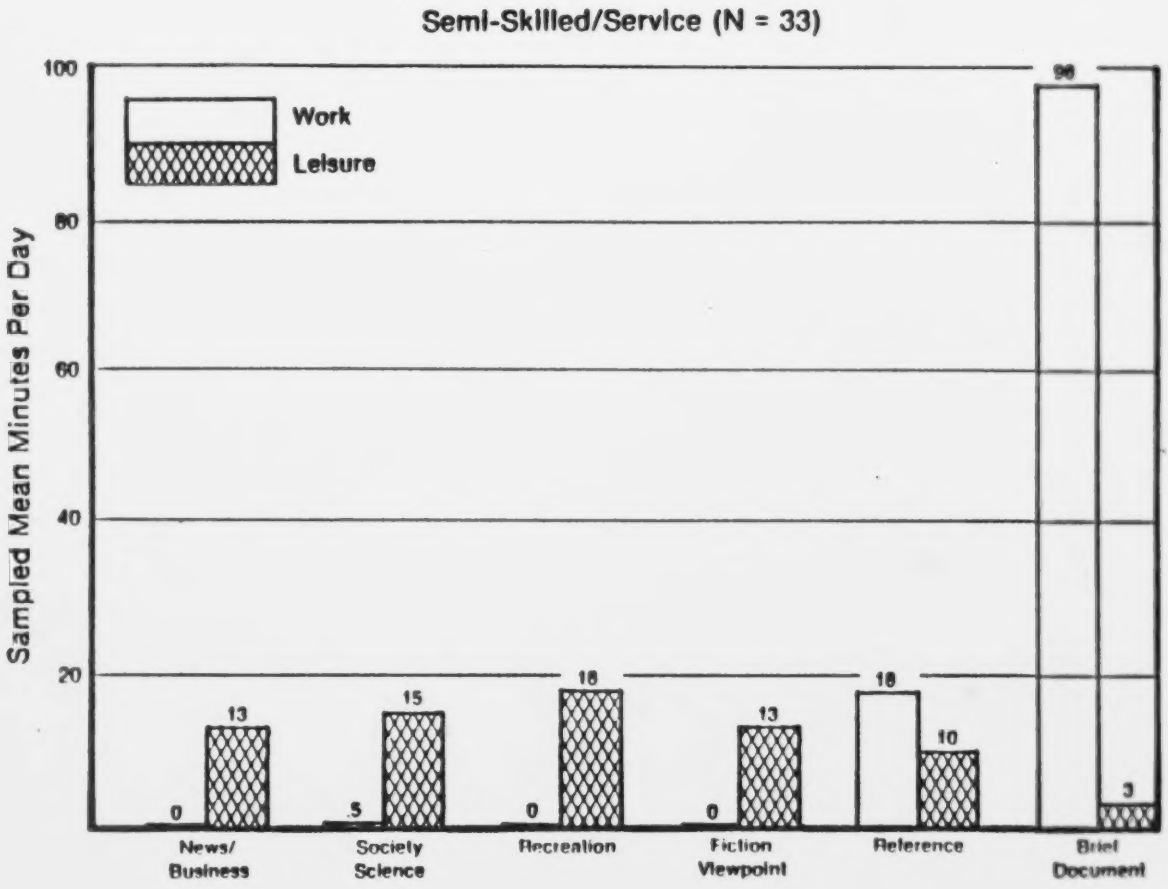
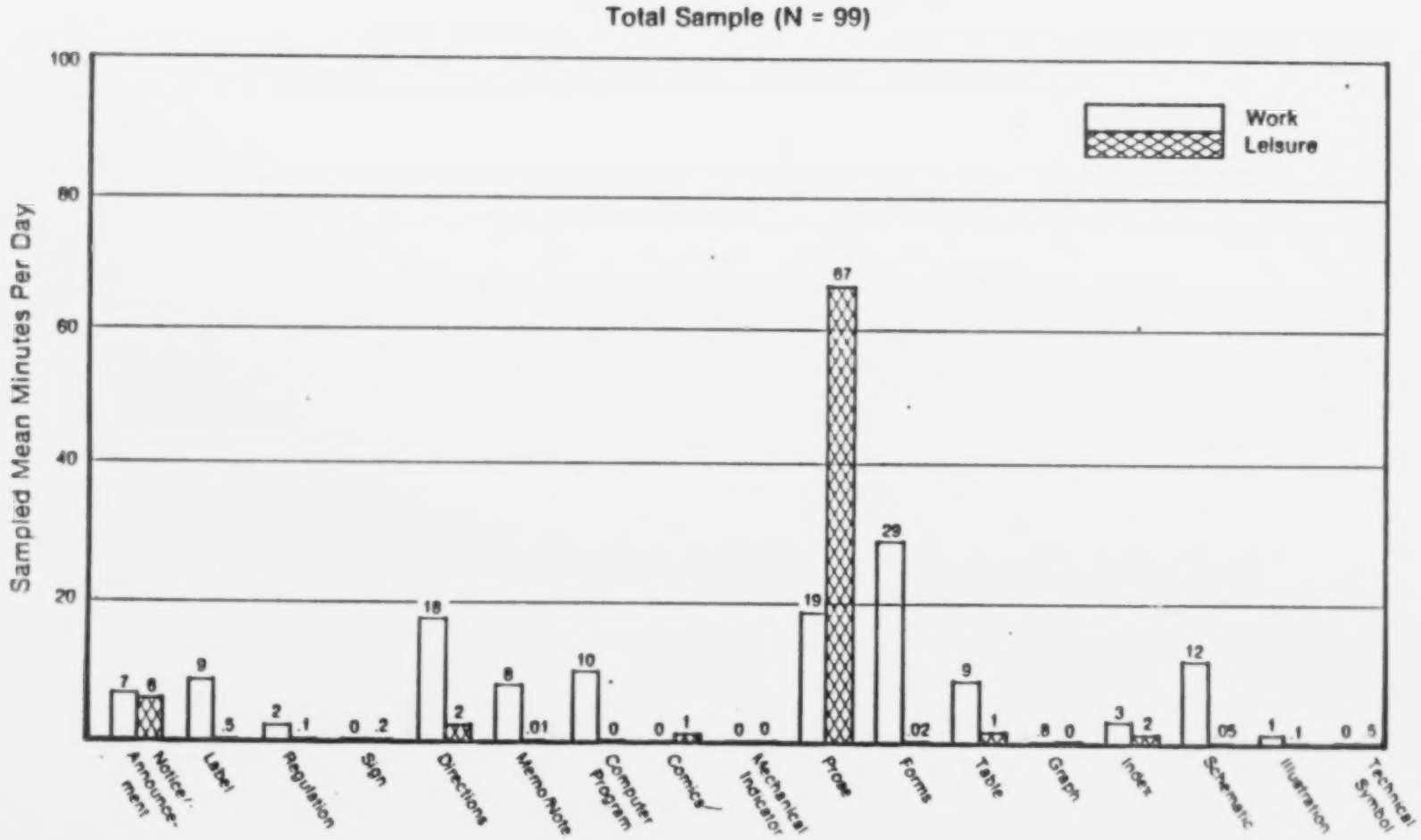


Figure 6

Materials Read for Work & Leisure



Contents and uses 58

Figure 7

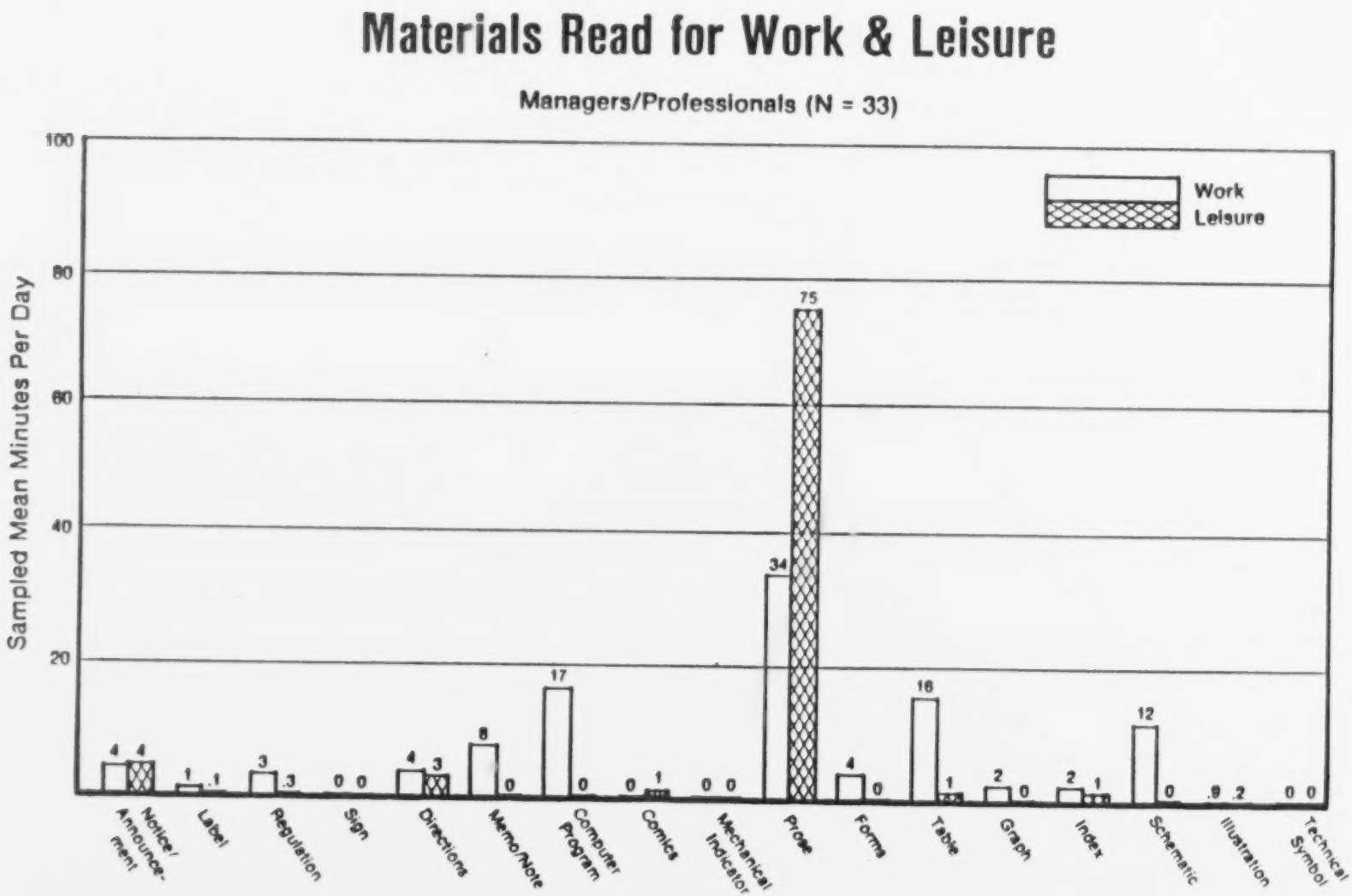

Materials Read for Work & Leisure
Managers/Professionals (N = 33)
Sampled Mean Minutes Per Day
100
80
60
40
20
Work
Leisure
4 4
1 .1
3 .3
0 0
4 3
8 0
17 0
0 1
0 0
34 75
4 0
16 1
2 0
2 1
12 0
.9 .2
0 0
Notice/ Announce-ment
Label
Regulation
Sign
Directions
Memo/Note
Computer Program
Comics
Mechanical Indicator
Prose
Forms
Table
Graph
Index
Schematic
Illustration
Technical Symbol

Figure 8

Materials Read for Work & Leisure

Technicians/Skilled (N = 21)

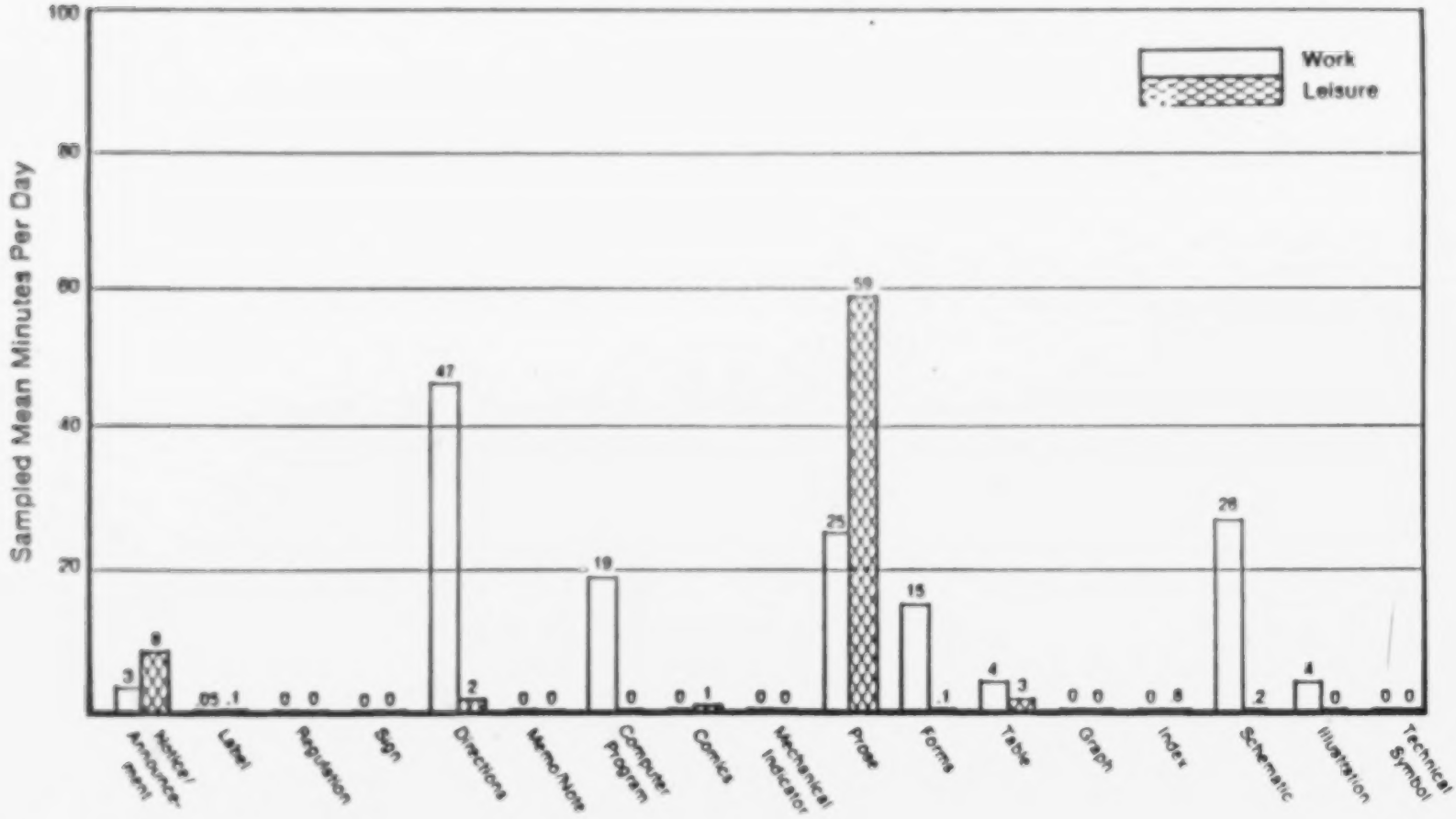


Figure 9

Materials Read for Work & Leisure

Clerks (N = 12)

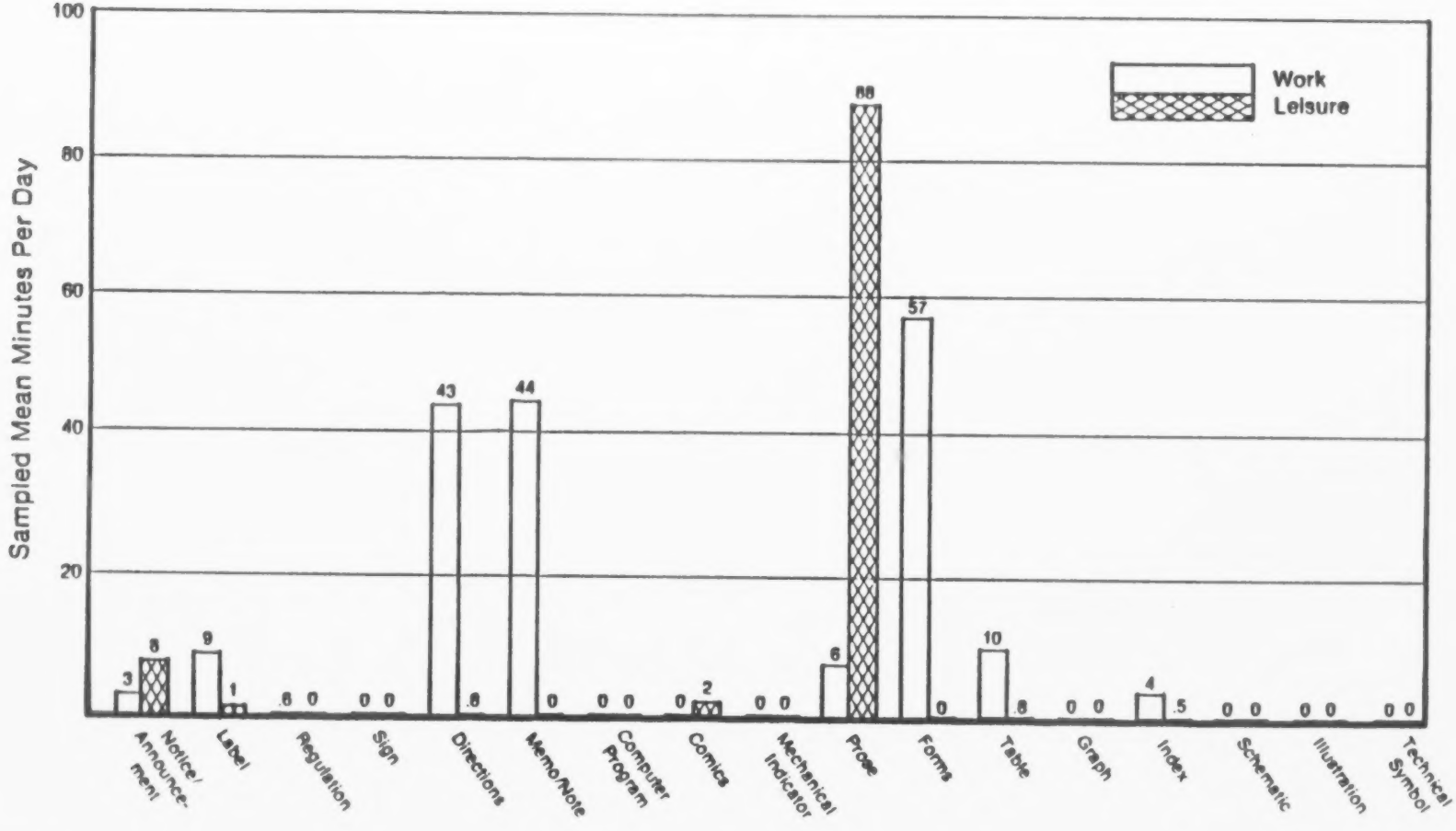


Figure 10

Materials Read for Work & Leisure

Semi-Skilled/Service (N = 33)

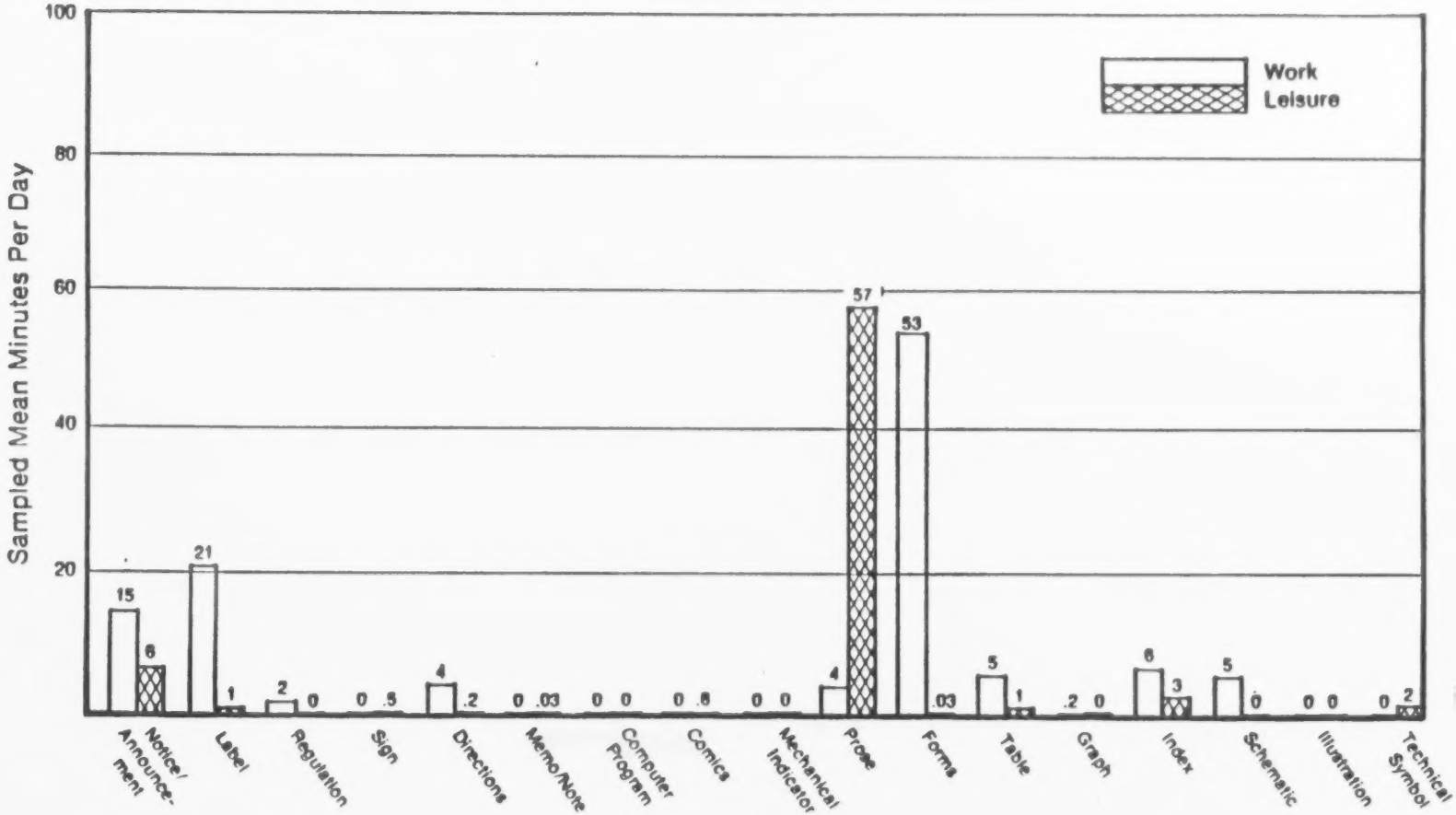


Figure 11

Uses of Reading for Work & Leisure

Total Sample (N = 99)

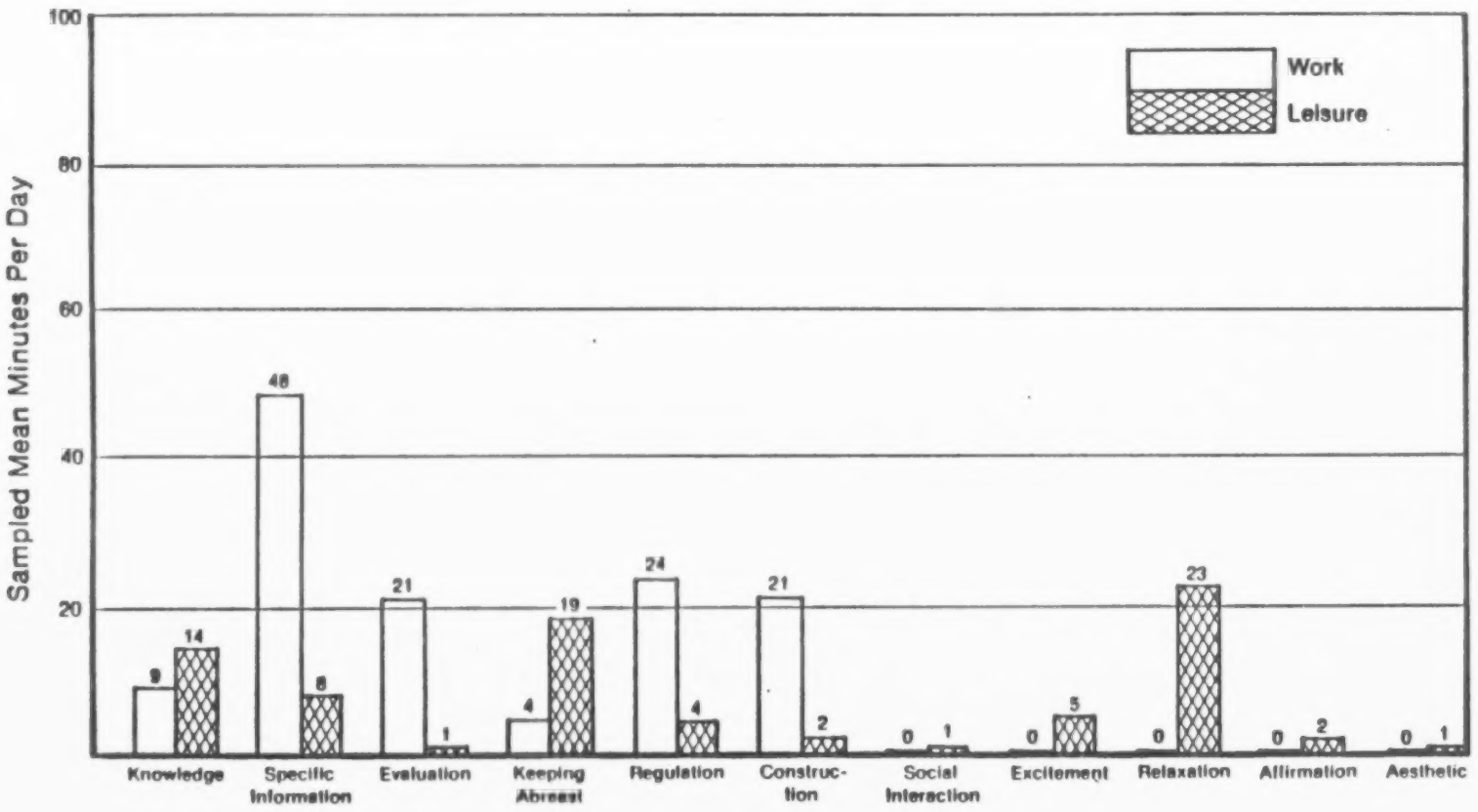


Figure 12

Uses of Reading for Work & Leisure

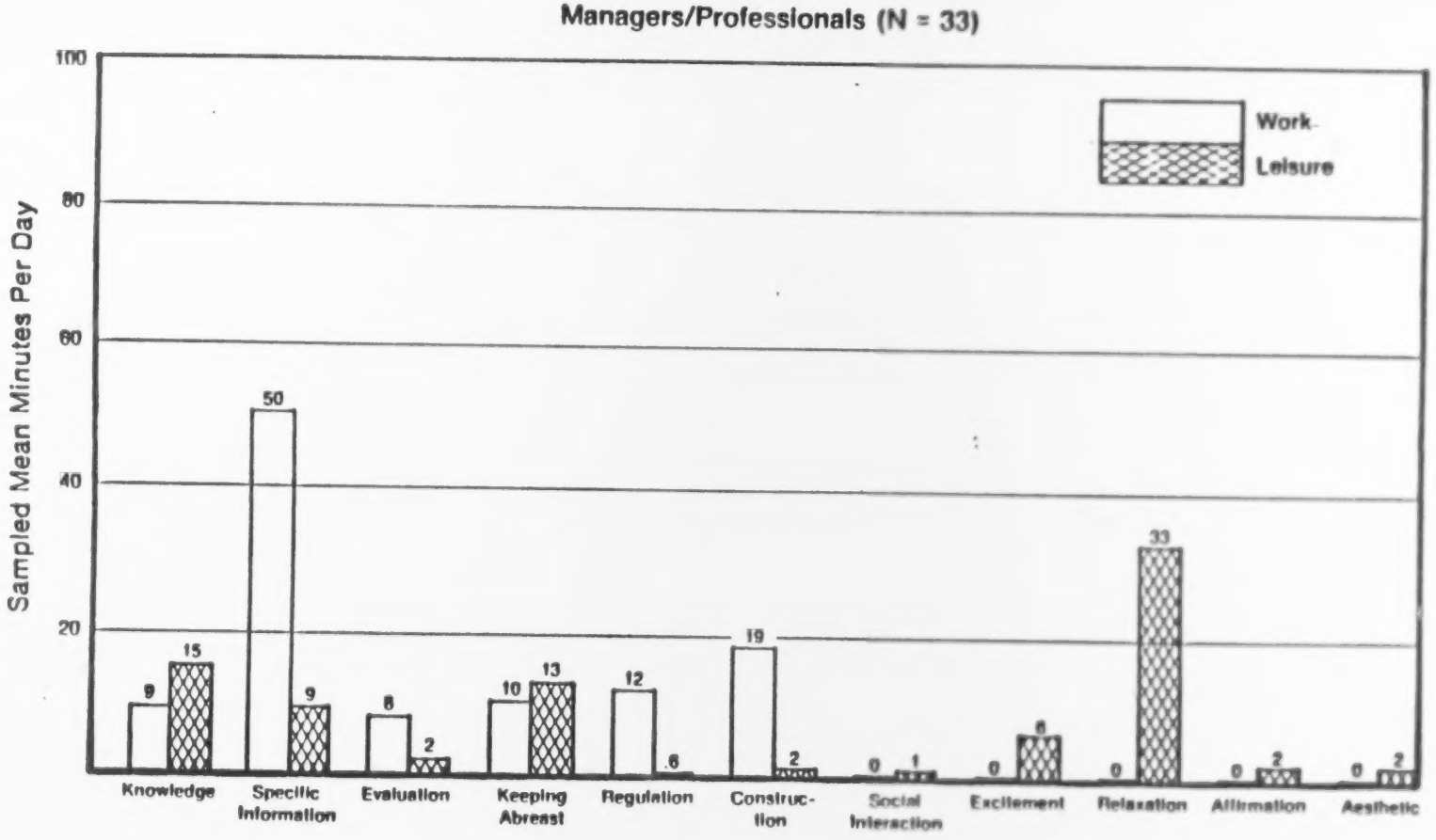


Figure 13

Uses of Reading for Work & Leisure

Technicians/Skilled (N = 21)

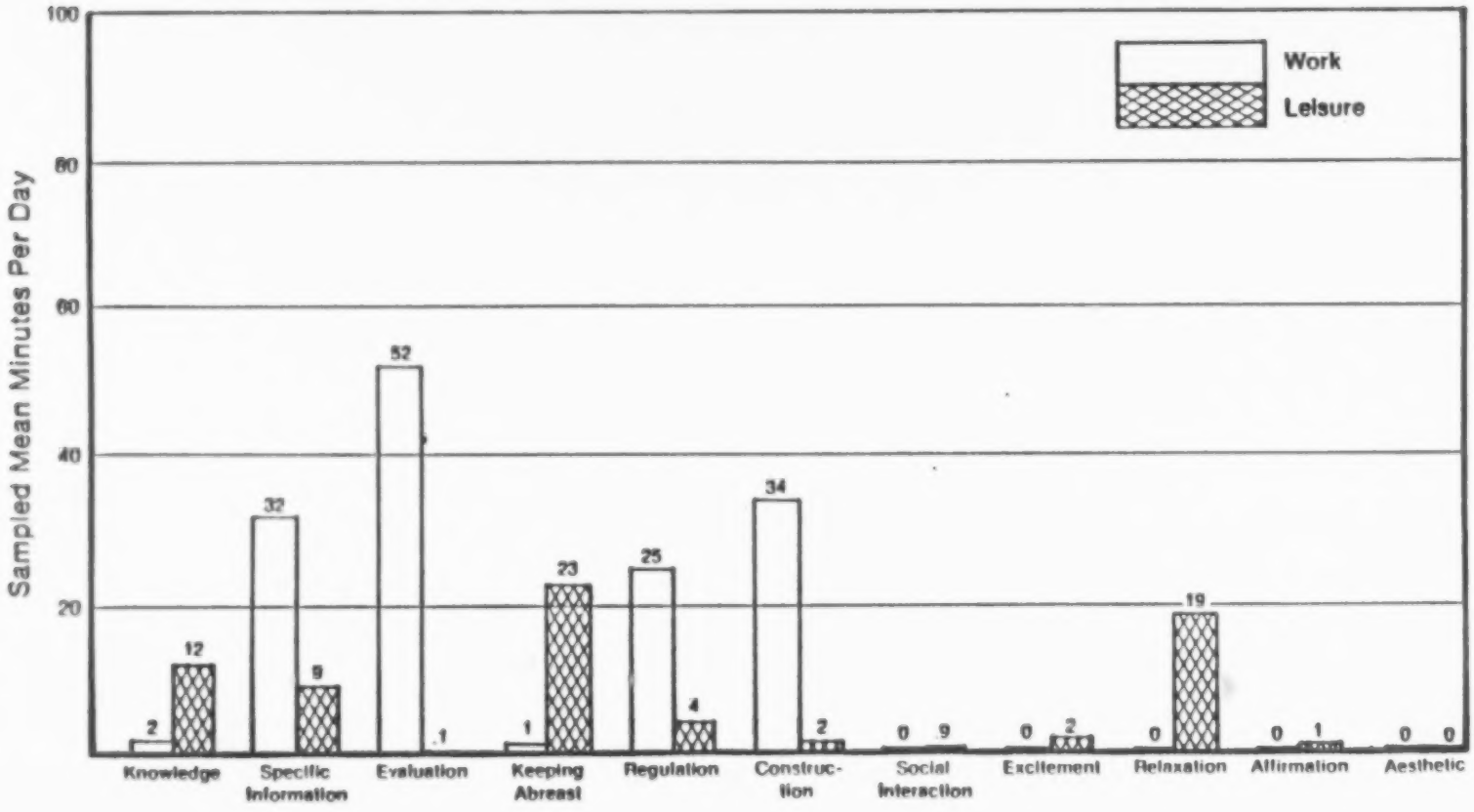


Figure 14

Uses of Reading for Work & Leisure

Clerks (N = 12)

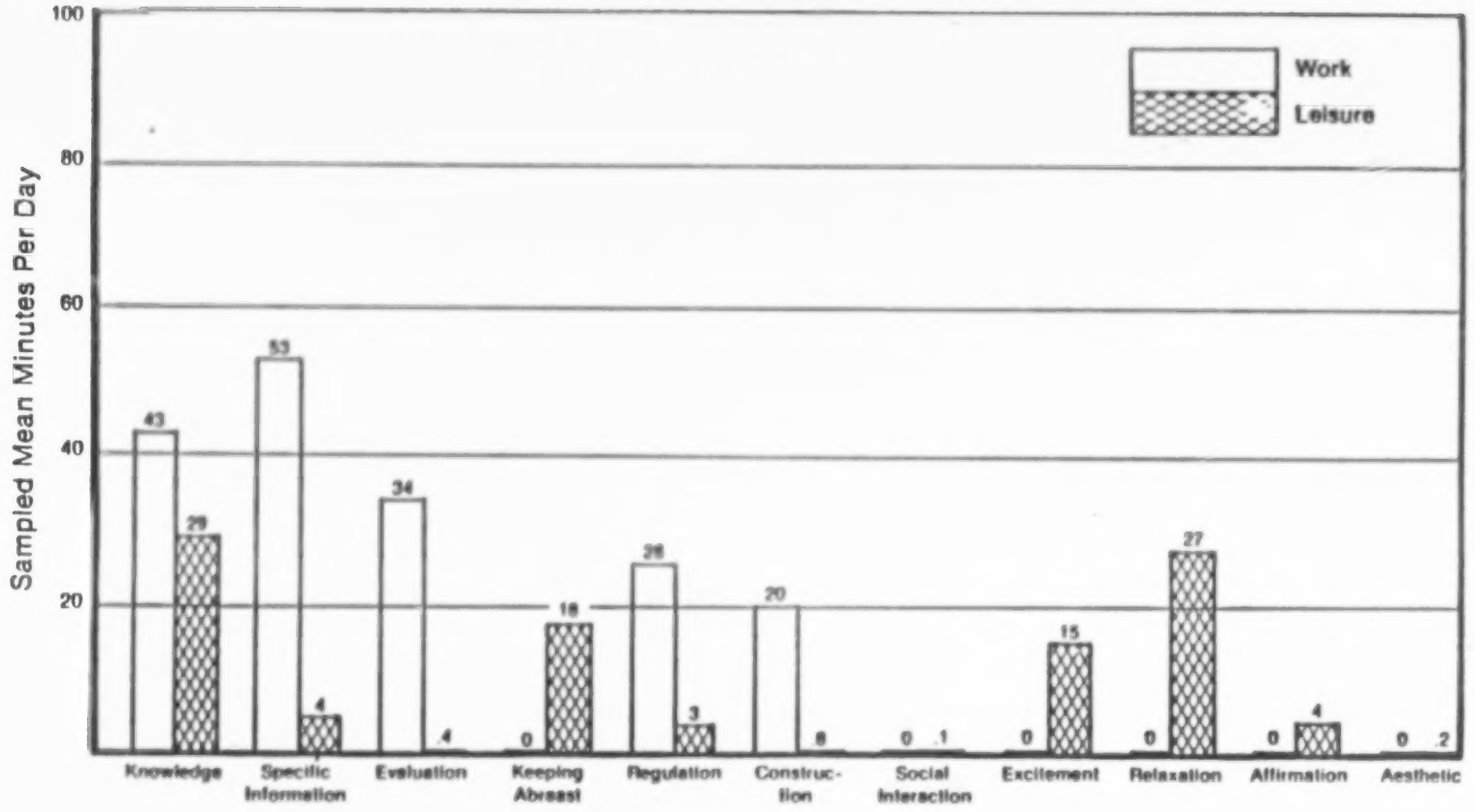
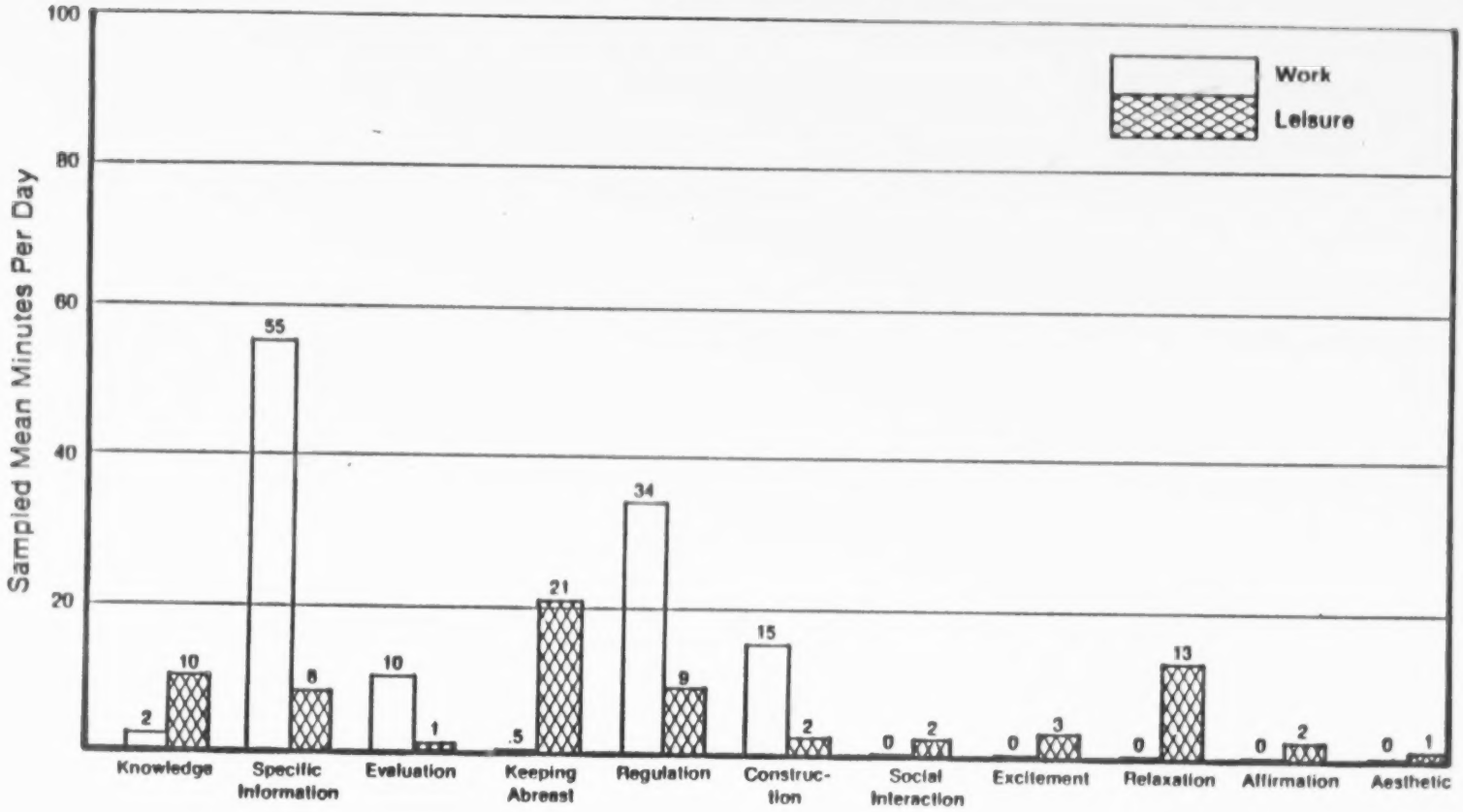


Figure 15

Uses of Reading for Work & Leisure

Semi-Skilled/Service (N = 33)



Appendix A: Reading Activity Inventory

READING ACTIVITY INVENTORY

International Reading Association

Orientation

This is an inventory of your reading activities. You should think of reading as gaining meaning from written messages. Reading activities should be counted if they are the only thing you are doing; they should also be counted if you are reading while you are doing something else, such as eating a meal, resting, studying, working at a job, or traveling. Reading may occur for any length of time, from 1 minute to 1 hour or longer. We are interested in how much reading you do each month. You should include what you read at your place of residence, at your work, for school, and on the non-work days such as weekends or holidays. This inventory will cover topics read from newspapers, books, textbooks, magazines, and brief documents.

BEST COPY AVAILABLE

1. Do you read a newspaper? ____ yes ____ no

If the answer to Question 1 is no, go to Question 4.
If yes, answer Questions 2 & 3

2. What is (are) the name(s) of the newspaper(s) you read? _____

3. How often do you read the following topics in the newspaper? Look at the "Local News" topic. To its right are "Frequency" categories. If you read the local news "Rarely" (less than once a month), circle the "0." If you read it "Daily" (5 or more times a month), circle the "4." Then, in the next section to the right, indicate the total number of minutes you spend on the local news each day you read it. If you read it for 10-14 minutes each day, circle the "7." If you read for more than 60 minutes, write the correct total number of minutes in the "Specify" column. You should omit the section if you read the local news rarely and you circled "0." Proceed through each topic the same way as you did "Local News."

In the next column to the right titled "Benefit," circle the number indicating the primary benefit this reading is for you. For example, if you read this material for your job (or school) only, circle "1"; if you read it for your leisure only, circle "5." However, if the benefit from this reading is some combination of job (or school) and leisure, circle the number that most accurately reflects this combination. If you are in school full time, use the Job(School) category for school-oriented reading.

NEWSPAPER (General & Trade)	FREQUENCY (Days per month)				TIME (Minutes per day)						BENEFIT				
	Rarely(less 1/mo.)	Monthly(1-3/mo.)	Weekly(1/wk.)	Often(2-4/wk.)	Daily(5 more/wk.)	1-4 min./day	5-9 min./day	10-14 min./day	15-29 min./day	30-60 min./day	Over 60 min. (Specify)	Job(School) only	Primarily Job(School)--Some Leisure	Job(School) & Leisure Equal	Primarily Leisure--Some Job(School)	Leisure only
News and Business (3a)															
Local news (state & community)	1	2	3	4	5	6	7	8	9		1	2	3	4	5
National news	1	2	3	4	5	6	7	8	9		1	2	3	4	5
International news	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Business/economics	1	2	3	4	5	6	7	8	9		1	2	3	4	5
									(3a)						
Society and Science (3b)															
Health/nutrition/home economics	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Human interest/ prominent people	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Social problems/ education	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Religion	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Science	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Psychology (self-improvement and behavior)	1	2	3	4	5	6	7	8	9		1	2	3	4	5
									(3b)						

BEST COPY AVAILABLE

NEWSPAPER (Continued)	FREQUENCY (Days per month)								TIME (Minutes per day)			BENEFIT			
	Rarely(less 1/mo.) Specify	Monthly(1-3/mo.)	Weekly(1/wk.)	Often(2-4/wk.)	Daily(5 more/wk.)	1-4 min./day	5-9 min./day	10-14 min./day	15-29 min./day	30-60 min./day	Over 60 min. (Specify)	Job(School) only	Primarily Job(School) -Some Le.. /Pl	Primarily Leisure- Some Job(School)	Leisure Only
Recreation (3c)															
Sports	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Travel	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Hobbies, Games Activities	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Other: Specify: _____	1	2	3	4	5	6	7	8	9			1	2	3	4	5
									(3c)							
Fiction/Viewpoint (3d)															
Editorials	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Humor (comics, cartoons, jokes)	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Stories	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Reviews (book, TV, movie)	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Other: Specify: _____	1	2	3	4	5	6	7	8	9			1	2	3	4	5
									(3d)							
Reference (3e)															
Classified ads	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Announcements (births, deaths, weddings, community activities)	1	2	3	4	5	6	7	8	9			1	2	3	4	5
TV/radio/movie listings	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Stock & Financial Listings	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Consumer Advertising	1	2	3	4	5	6	7	8	9			1	2	3	4	5
Other: Specify: _____	1	2	3	4	5	6	7	8	9			1	2	3	4	5
									(3e)							

BEST COPY AVAILABLE

BEST COPY AVAILABLE

4. In this questionnaire, "reading" includes skimming to find information, reading a small section, studying, reading an entire book, following directions, or other ways of gaining meaning. These activities may occur at work, at home, or in different situations.

With this idea of reading in mind, have you read anything from a book during the last 6 months?

yes ____ no ____

If the answer to Question 4 is no, go to Question 6.

If yes, answer Question 5.

5. What topics do you read most frequently in books? How often do you read the following topics in books? (Do not include newspapers or magazines.) For each topic, such as "Natural Science," fill in the "Frequency," "Time," and "Benefit" as you did for newspapers.

BOOKS (Books/Textbooks)	FREQUENCY (Days per month)									TIME (Minutes per day)						BENEFIT				
	Rarely (less 1/mo.) Specify	Monthly (1-3/mo.)	Weekly (1/wk.)	Often (2-4/wk.)	Daily (5 more/wk.)	1-4 min./day	5-9 min./day	10-14 min./day	15-29 min./day	30-60 min./day	Over 60 min. (Specify)	Job(School) only	Primarily Job(School)--Some Leisure	Job(School) & Leisure Equal	Primarily Leisure--Some Job(School)	Leisure Only				
News & Business (5a)																				
Politics/news/law	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
Business/economics	1	2	3	4	5	6	7	8	9	(5a)	1	2	3	4	5					
Society & Science (5b)																				
Natural science (Physics, chemistry, biology, geology)	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
Social science (sociology, education)	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
Psychology (Personality emotion, behavior, self-improvement)	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
Religion/philosophy	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
Home maintenance/ improvement	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
Health/hygiene/ medicine	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
History/biography/ geography-travel	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
Arts (painting, music, theater)	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
Agriculture (Plants and animals)	1	2	3	4	5	6	7	8	9		1	2	3	4	5					
Engineering/con-struction/electrical	1	2	3	4	5	6	7	8	9	(5b)	1	2	3	4	5					

	FREQUENCY (Days per month)				TIME (Minutes per day)						BENEFIT				
BOOKS (continued)	Rarely (less 1/mo.) Specify	Monthly (1-3/mo.)	Weekly (1/wk.)	Often (2-4/wk.)	Daily (5 more/wk.)	1-4 min./day	5-9 min./day	10-14 min./day	15-29 min./day	30-60 min./day	Over 60 min. (Specify)	Job (School) only	Primarily Job (School) - Some Leisure	Job (School) & Leisure Equal	Primarily Leisure - Some Job (School)	Leisure Only
Recreation and Sports (5c)																
Sports		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Travel		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Hobbies, Activities, Games		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Other: Specify: _____		1	2	3	4	5	6	7	8	9		1	2	3	4	5
										(5c)						
Fiction/Viewpoint (5d)																
Literature (novels)		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Stories		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Humor		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Drama/Poetry		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Children's literature		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Other: Specify: _____		1	2	3	4	5	6	7	8	9		1	2	3	4	5
										(5d)						
Reference (5e)																
Directories (dictionary, telephone book, index)		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Manuals (how-to, repairs, cooking, office procedures)		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Handbooks of information		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Encyclopedias		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Catalogues for buying		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Other: Specify: _____		1	2	3	4	5	6	7	8	9		1	2	3	4	5
										(5e)						

BEST COPY AVAILABLE

BEST COPY AVAILABLE

6. Now we will continue this inventory with magazines (including journals, pamphlets, and periodicals).

Have you reading anything from a magazine during the past 6 months?

yes ____ no ____

If the answer to Question 6 is no, go to Question 9. If yes, answer Questions 7 and 8.

7. What magazines do you read regularly?

8. What topics do you read most frequently in magazines (journals, pamphlets, periodicals)? How much time do you spend reading the following topics in magazines? Enter the "Frequency," "Time," and "Benefits" on magazines as you did for books or newspapers.

MAGAZINES, JOURNALS, REPORTS, PAMPHLETS	FREQUENCY (Days per month): Rarely(less 1/mo.) Specify	Monthly(1-3/mo.)	Weekly(1/wk.)	Often(2-4/wk.)	Daily(5 more/wk.)	TIME (Minutes per day): 1-4 min./day	5-9 min./day	10-14 min./day	15-29 min./day	30-60 min./day	Over 60 min. (Specify)	BENEFIT: Job(School) only	Primarily Job(School)--Some Leisure	Job(School) & Leisure Equal	Primarily Leisure--Some Job(School)	Leisure only
News and Business (8a)																
Local news (state and community)	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
National news	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
International news	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
Business/economics	1	2	3	4	5	6	7	8	9	(8a)	1	2	3	4	5	
Society & Science (8b)																
Natural science (Physics, chemistry, biology, geology)	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
Social science (sociology, education)	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
Psychology (Personality, emotion, behavior, self-improvement)	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
Religion/philosophy	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
Home maintenance/ improvement	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
Health/hygiene/ medicine	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
History/biography/ geography-travel	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
Arts (painting, music, theater)	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
Agriculture (Plants and animals)	1	2	3	4	5	6	7	8	9		1	2	3	4	5	
Engineering/con-struction/electrical	1	2	3	4	5	6	7	8	9	(8b)	1	2	3	4	5	

	FREQUENCY (Days per month)									TIME (Minutes per day)					BENEFIT	
Magazines (continued)	Rarely/Less 1/mo.) Specify	Monthly(1-3/mo.)	Weekly(1/wk.)	Often(1-2/wk.)	Daily(3 more/wk.)	1-4 min./day	5-9 min./day	10-14 min./day	15-29 min./day	30-60 min./day	Over 60 min. (Specify)	Job(School) only	Primarily Job(School)--Some Leisure	Primarily Job(School) & Leisure Equal	Primarily Leisure--Some Job(School)	Leisure Only
Recreation (8c)																
Sports		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Travel		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Hobbies, Games, Activities		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Other: Specify		1	2	3	4	5	6	7	8	9 (8c)		1	2	3	4	5
Fiction/Viewpoint (8d)																
Editorials		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Humor (comics, cartoons, jokes)		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Stories		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Reviews (book, TV, theater, arts)		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Other: Specify:		1	2	3	4	5	6	7	8	9 (8d)		1	2	3	4	5
Reference (8e)																
Classified ads		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Announcements (births, deaths, weddings, community activities)		1	2	3	4	5	6	7	8	9		1	2	3	4	5
TV/radio/movie listings		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Consumer advertising		1	2	3	4	5	6	7	8	9		1	2	3	4	5
Other: Specify:		1	2	3	4	5	6	7	8	9 (8e)		1	2	3	4	5

BEST COPY AVAILABLE

9. Many reading materials are contained in brief documents, such as letters or forms. How often do you read the following 16 kinds of documents? Include reading from a computer terminal or printed output here.

BRIEF DOCUMENTS (from paper or computer terminals)	FREQUENCY (Days per month)					TIME (Minutes per day)					BENEFIT				
	Rarely (less 1/mo.) Specify	Monthly (1-3/mo.)	Weekly (1/wk.)	Often (2-4/wk.)	Daily (5 more/wk.)	1-4 min./day	5-9 min./day	10-14 min./day	15-29 min./day	30-60 min./day	Over 60 min. (Specify)	Job(School) only	Primarily Job(School)--Some Leisure	Primarily Leisure--Some Job(School)	Leisure Only
Bills/invoices	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Personal letters	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Newsletters/bulletins	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Labels or addresses	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Notices on signs or billboards	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Business correspondence	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Memos/notes	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Schedules/maps	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Forms to fill out or read	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Files or records	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Legal documents	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Information for purchase (size, weight, contents)	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Diagrams/charts	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Directions	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Computer programs	1	2	3	4	5	6	7	8	9		1	2	3	4	5
Computerized manuals or directions	1	2	3	4	5	6	7	8	9		1	2	3	4	5

BEST COPY AVAILABLE

Background Information

Please provide the following information. Check one alternative

Sex: ___Male ___Female

Education:
___primary (0-8 years)
___secondary (9-12 years)
___some college or technical school (1-2 years)
___college/university graduate (4 years)
___some graduate work
___higher degree; specify MA, MS, PhD, MD___

Occupation:
___Job title_____
___Student (full time)
___Homemaker
___Retired

Date of Birth: _____ Month _____ Day _____ Year

Place of residence:
___rural
___town
___suburb
___urban

BEST COPY AVAILABLE

BEST COPY AVAILABLE

MATERIAL AND USE FORM

READING ACTIVITIES SURVEY NO. _____

MEDIA AND TOPIC _____

I. DIRECTIONS:

THIS IS THE SECOND AND FINAL PART OF THE RESEARCH STUDY SEEKING TO BETTER UNDERSTAND THE READING ACTIVITIES OF STUDENTS AND ADULTS IN SCHOOL, WORK AND LEISURE SETTINGS. AS YOU WILL RECALL, PART ONE ASKED YOU TO REPORT ON THE FREQUENCY AND TIME YOU REGULARLY SPEND READING DIFFERENT TOPICS IN NEWSPAPERS, MAGAZINES, BOOKS AND BRIEF DOCUMENTS.

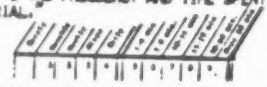
FOR THIS PHASE OF THE STUDY, I HAVE SELECTED FROM AMONG YOUR REPORTED READING ACTIVITIES A SAMPLE OF TOPICS HAVING THE HIGHEST VOLUME FOR YOU. I WOULD NOW LIKE TO ASK YOU TO TALK ABOUT YOUR READING OF EACH OF THESE TOPICS. THIS DISCUSSION WILL FOCUS ON A DESCRIPTION OF THE MATERIAL READ ALONG WITH YOUR USE FOR IT. I WILL EXPLAIN WHAT I MEAN BY THESE TERMS AS WE GO ALONG.

II. MATERIALS:

1. KEY THE RESPONDENT BY SAYING — " YOU REPORTED READING _____ FOR _____. DO YOU THINK THIS ESTIMATE IS ACCURATE, OR WOULD YOU LIKE TO CHANGE IT?

   ___ ACCURATE ___ CHANGE

   IF THE RESPONDENT INDICATED CHANGE, ASK HIM/HER TO "INDICATE THE FREQUENCY AND TIME SPENT READING THIS MATERIAL."



2. GIVE THE RESPONDENT THE MATERIALS/ FEATURES LIST — "HERE IS A LIST OF TYPES OF MATERIALS AND KEY FEATURES COMMONLY ENCOUNTERED IN DIFFERENT ENVIRONMENTS."
3. "USING THIS LIST, INDICATE WHICH TYPE THE MATERIAL WE HAVE BEEN DISCUSSING IS."
4. IF THE RESPONDENT SELECTS TYPES 1-9, ASK HIM/HER TO "GIVE ONE OR TWO MAIN FEATURES FROM THE LIST."
5. CODE MATERIAL FEATURE

   ☐☐ ☐☐

Material (code)	
Notice/Announcement	(01)
Label	(02)
Regulation	(03)
Sign	(04)
Directions	(05)
Menu/Price	(06)
Computer Program	(07)
Comics	(08)
Mechanical Indicator	(09)
Prose	(10)
Form	(11)
Table	(12)
Graph	(13)
Index	(14)
Schematic	(15)
Illustration	(16)
Technical Symbol(s)	(17)

Feature (code)	
Prose	(1)
Form	(2)
Table	(3)
Graph	(4)
Index	(5)
Schematic	(6)
Illustration	(7)
Technical Symbol(s)	(8)

III. USES:

1. KEY RESPONDENT BY SAYING — "I WOULD NOW LIKE TO FIND OUT ABOUT YOUR USES FOR READING THIS MATERIAL."
2. "YOU MAY THINK OF USE IN TERMS OF EITHER GOALS OR OUTCOMES OR BOTH."
3. "A GOAL IS YOUR MAIN INTENDED PURPOSE FOR READING THIS MATERIAL; WHY YOU READ IT. IF YOU HAVE MORE THAN ONE GOAL FOR READING THIS MATERIAL, INDICATE ONE AS PRIMARY AND THE OTHER AS SECONDARY."
4. "AN OUTCOME IS AN UNINTENDED BENEFIT THAT MAY OCCUR AFTER READING A GIVEN MATERIAL. THIS REFERS TO A RESULT THAT WAS NOT PART OF YOUR MAIN GOAL IN READING."
5. GIVE USES LIST TO RESPONDENT AND READ IT OVER WITH HIM/ HER.
6. "USING THIS LIST, WHAT WERE THE GOAL(S) AND/ OR OUTCOME(S) FOR THIS MATERIAL?"

Uses	Goal P	Goal S	Outcome P	Outcome S
1. Knowledge				
2. Specific Information				
3. Evaluation				
4. Keeping Abreast				
5. Regulation				
6. Construction				
7. Social Interaction				
8. Environment				
9. Relaxation				
10. Affirmation				
11. Aesthetic				
12. Other specify _____				

Uses of Reading List*

1. KNOWLEDGE
   :Increase knowledge for self improvement; learn and remember a total body of information.

   Ex.: Read an article carefully to understand the causes of inflation and unemployment.

2. INFORMATION—SPECIFIC
   :Find specific information which may be embedded in large amounts of print; locate information to satisfy a particular need.

   Ex.: Locate in a memo or notice what day the office picnic will be held.

3. EVALUATION
   :Examine and judge written material; detect, correct, or revise a document or material.

   Ex.: Reread a paper or composition for spelling and grammatical errors; read several sources to write a paper; read a story for class discussion.

4. KEEPING ABREAST
   :To become aware of new ideas, facts, or developments; learn the gist of major topics.

   Ex.: Look over an article on the Middle East to see what the latest developments are.

---

5. REGULATION
   :Monitor equipment or operations, gradual improvement of physical or manual skill, control or guide language behavior of self or others.

   Ex.: Read gauges on equipment to ensure it is operating safely and correctly; read over notes or outline in order to give a talk or lecture; read a story to child.

6. CONSTRUCTION
   :Use language to write a paper, report, or computer program, build or make something, assemble or repair something.

   Ex.: Follow a set of instructions to assemble a bicycle.

7. SOCIAL INTERACTION
   :Exchange information in conversation, find out about friends, neighbors, or relatives.

   Ex.: Read the sports to talk to peers at lunch.

---

8. EXCITEMENT
   :Enjoy descriptions of places, events, or characters, receive stimulation through a suspenseful or adventurous story.

   Ex.: Experience stimulation from a mystery or thriller.

9. RELAXATION
   :Distract from daily routine; to pass time; amusement from unusual events.

   Ex.: Read a light magazine for rest or diversion.

10. AFFIRMATION
    :Extend or support sense of self, experience positive feelings, confirm spiritual beliefs.

    Ex.: Read the Bible to confirm moral beliefs.

11. AESTHETIC
    :Appreciate use of language, enjoy the forms of literature.

    Ex.: Enjoy the sounds of language or the visual images in a writer you appreciate.

*Handout given to respondents at second interview.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

Materials*

Definitions and Rules for Classification

1. Notice/announcement: a formal and sometimes public message declaring some approaching or past event, often identifying a specific time or place; includes advertisements, invoices, and bills.

2. Label: a piece of paper, cloth, leather, etc. that is attached to some object in order to help identify or describe something; includes titles and names.

3. Regulation: an authoritative statement usually having the force of law which deals with the responsibilites, obligations, limitations, or liabilites between a person and an organization or other people.

4. Sign: a publicly displayed word, symbol, or phrase used to dictate an action.

5. Directions: a list of steps or procedures frequently numbered containing detailed instructions that assist with some action or operation.

6. Memo/note: a brief, informal written communication that is circulated to one or more persons.

7. Computer program: sequence of coded instructions that are inserted into an electronic mechanism in order to guide its actions in a highly specified manner.

8. Comics: a presentation of a series of events or actions through a sequence of pictures usually accompanied by words or phrases denoting a conversation.

9. Mechanical indicator: an instrument or device that is used to index or register some condition.

10. Prose: an ordered sequence of connected discourse varying in length and content that intends primarily to give information, relate events, or communicate ideas or opinions, including poetry.

11. Form: a printed document consisting of a number of typographically arranged fill-in-the-blank items where an item may consist of an abbreviation, symbol, word, sentence, or paragraph.

12. Table: a condensed arrangement of data, usually numbers or words in rows and columns.

13. Graph: a diagram displaying the variation of one variable in combination with that of one or more other variables; consisting of lines, geometric forms or figures which may contain numbers and words.

14. Index: an alphabetical or numbered listing of all or nearly all items or topics covered in an associated document or text which may include where these items or topics may be found.

15. Schematic: a technical drawing of what an object or event looks like, usually including the labeling of key parts as well as showing logical relationships or processes.

16. Illustration: a picture or drawing that is helpful in making something clearer or more attractive.

17. Technical Symbol: a character, letter, or abbreviation used in a particular subject or discipline such as mathematics, science, or computer programming.

Rules for Classification

Items numbered 10-17 can function independently as materials or in combination with other features to make up a type of material—

—When feature is part of material then classify in terms of material

—When the material consists solely of the feature then classify in terms of the feature

—When items contain two or more materials then classify in terms of major focus of the ite

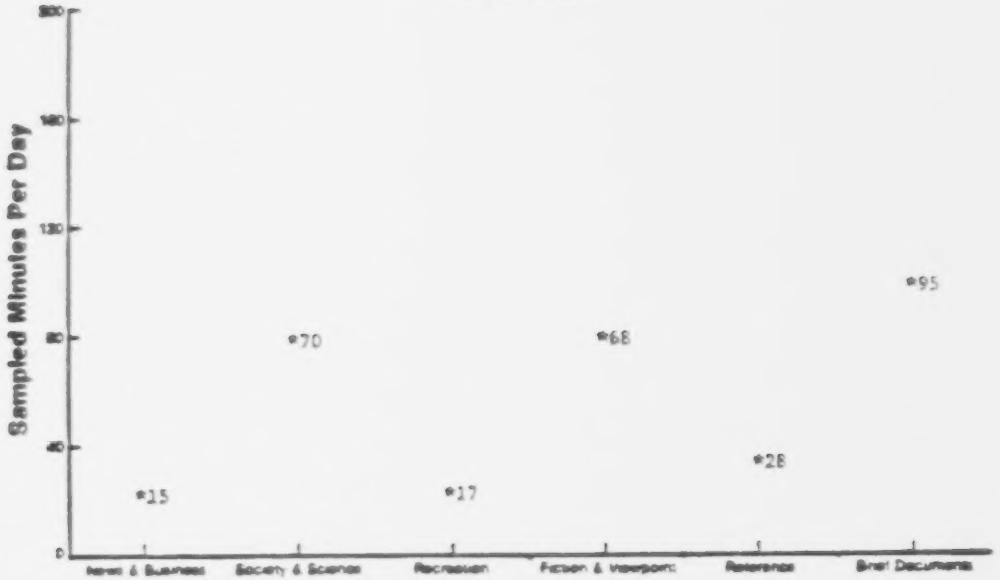
*Handout given to respondents at second interview.

Appendix B*: Reading Profiles

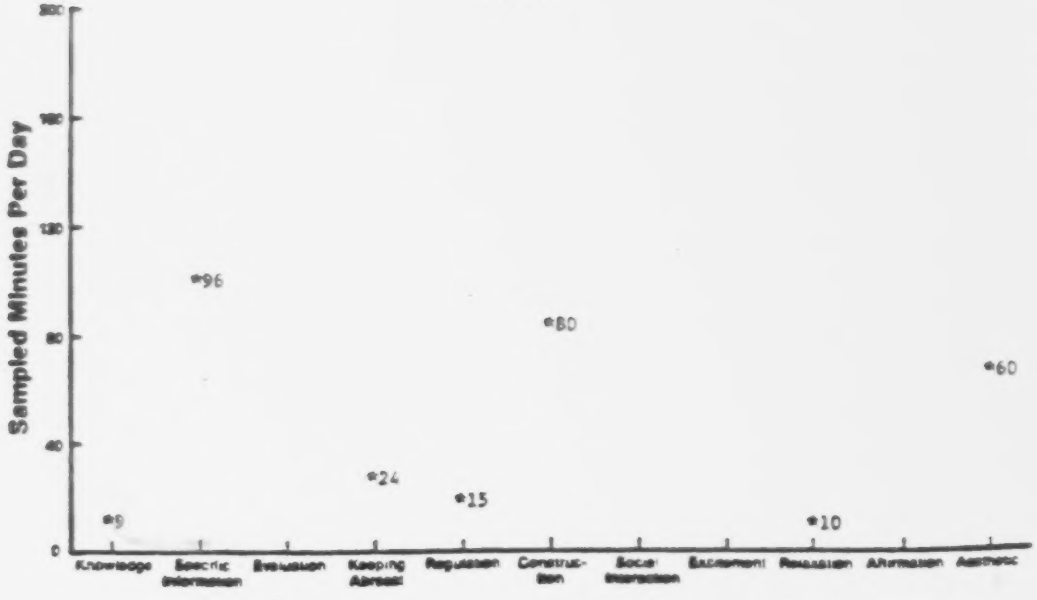
*Data were used to construct individual reading profiles based on the sampled minutes per day spent reading various contents or subject matters and the use for reading these contents. Displayed in this appendix is a sample of the profiles from among the 99 constructed. These profiles show individual patterns in reading across work and leisure settings.

Profiles of Reading

Contents



Uses

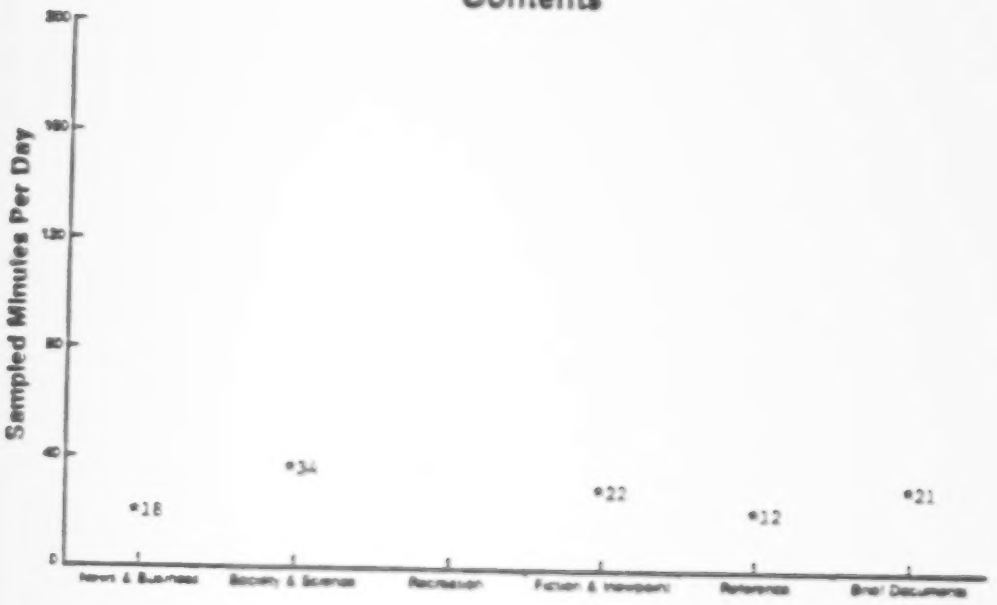


Note: The top figure shows sampled minutes per day read in each of the six content areas.
The bottom figure shows sampled minutes per day read for each of the eleven uses selected by the reader.
These sampled minutes per day represent, on average, approximately 70% of the total amount of time individuals reported reading per day.

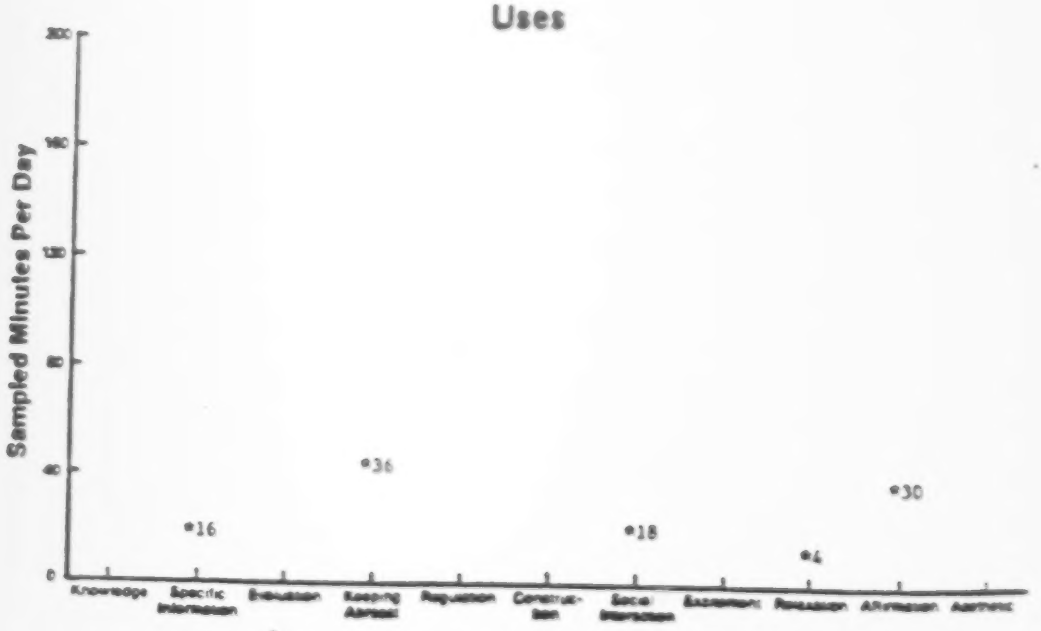
BEST COPY AVAILABLE

Profiles of Reading

Contents



Uses

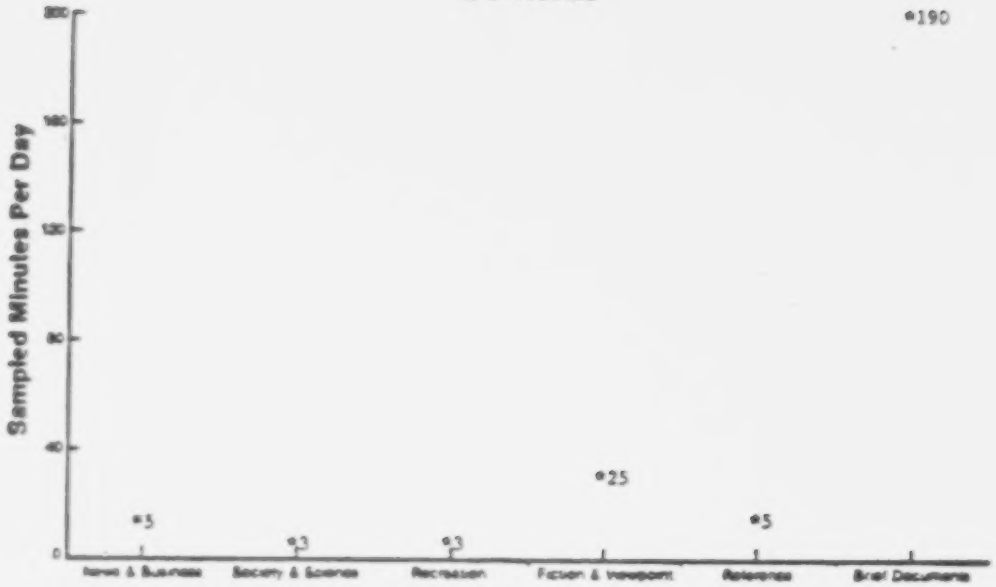


Note: The top figure shows sampled minutes per day read in each of the six domains areas.
The bottom figure shows sampled minutes per day read for each of the eleven uses selected by the reader.
These sampled minutes per day represent, on average, approximately 70% of the total amount of time individuals reported reading per day.

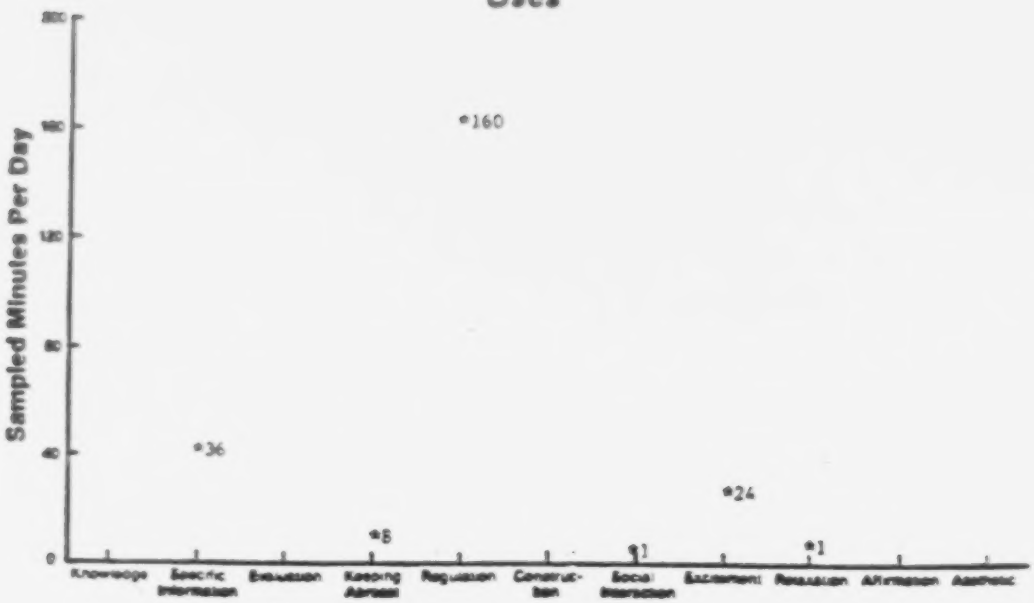
BEST COPY AVAILABLE

Profiles of Reading

Contents



Uses

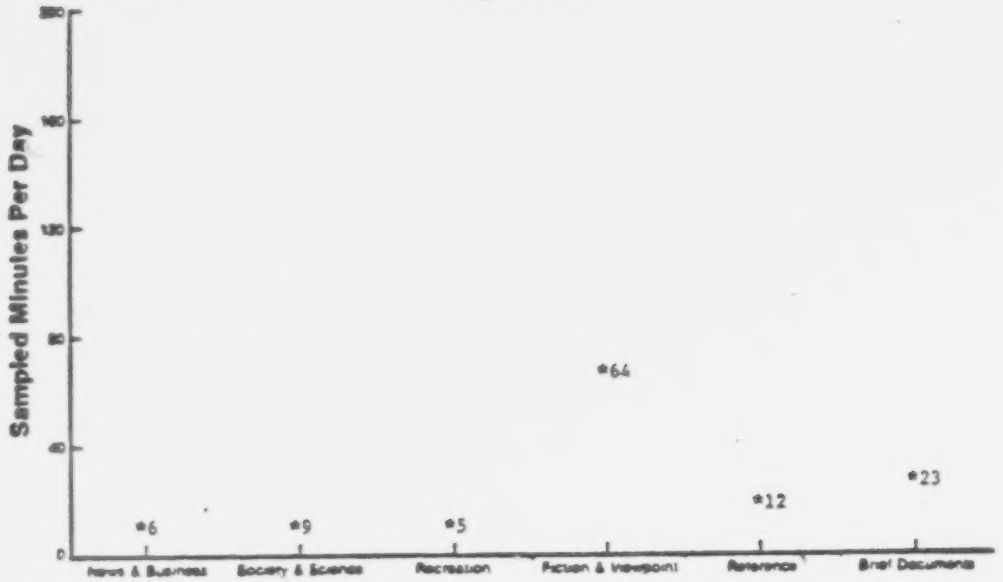


Note: The top figure shows sampled minutes per day read in each of the six content areas. The bottom figure shows sampled minutes per day read for each of the eleven uses selected by the reader. These sampled minutes per day represent, on average, approximately 70% of the total amount of time individuals reported reading per day.

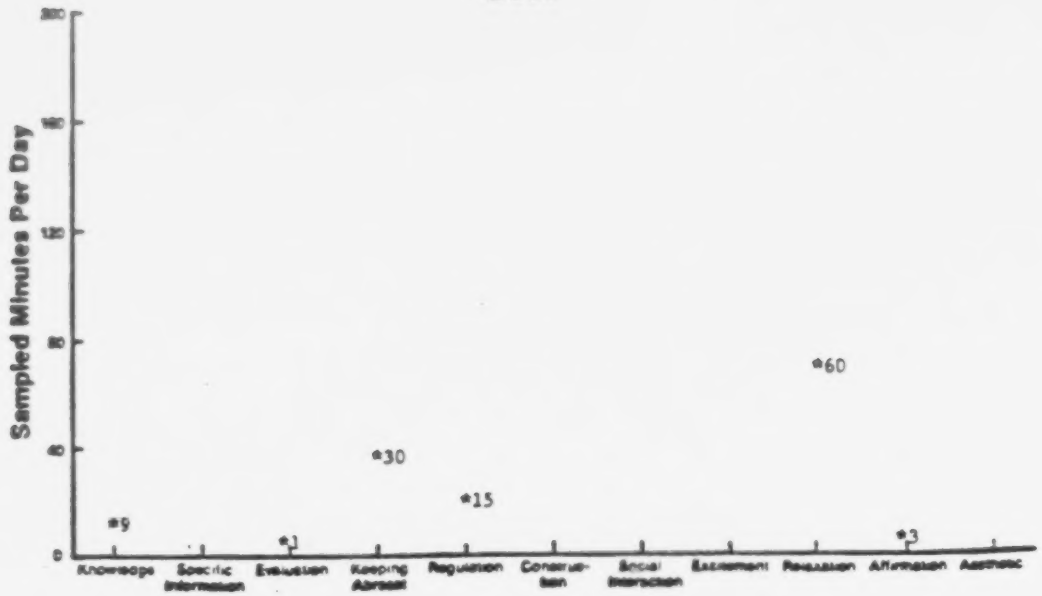
BEST COPY AVAILABLE

Profiles of Reading

Contents



Uses

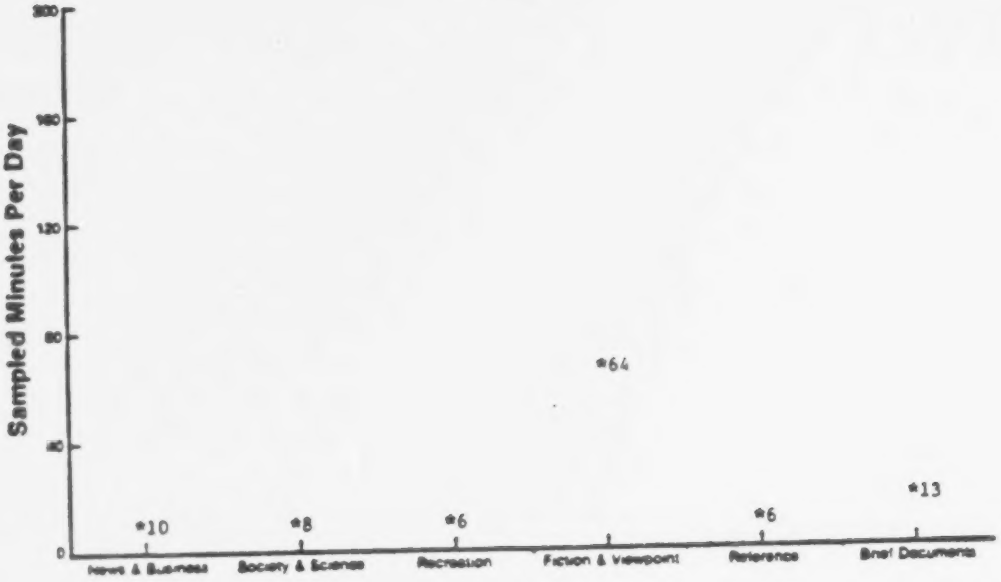


Note: The top figure shows sampled minutes per day read in each of the six content areas. The bottom figure shows sampled minutes per day read for each of the eleven uses selected by the reader. These sampled minutes per day represent, on average, approximately 70% of the total amount of time individuals reported reading per day.

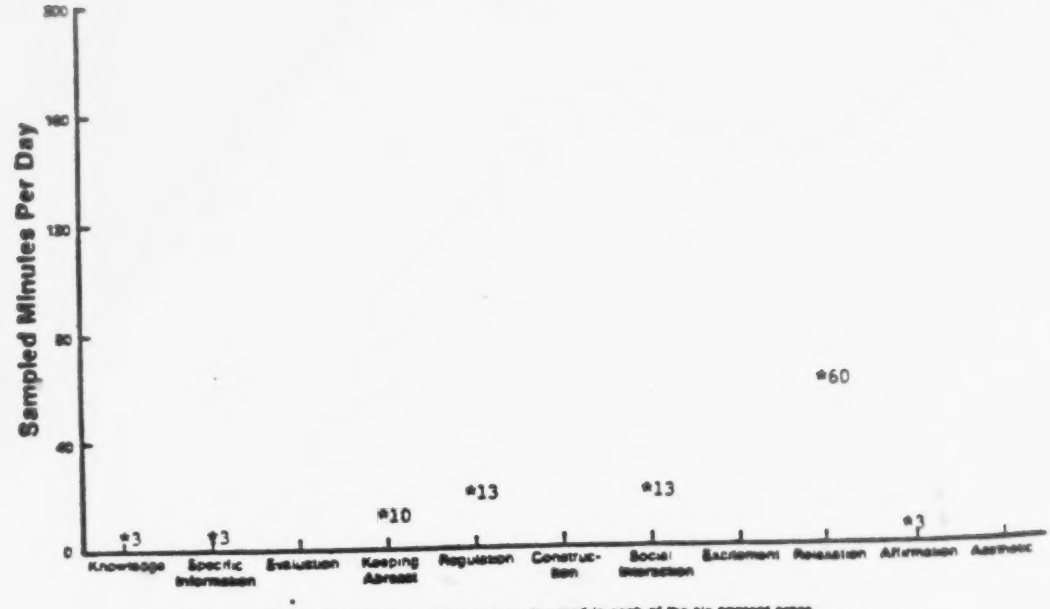
BEST COPY AVAILABLE

Profiles of Reading

Contents



Uses

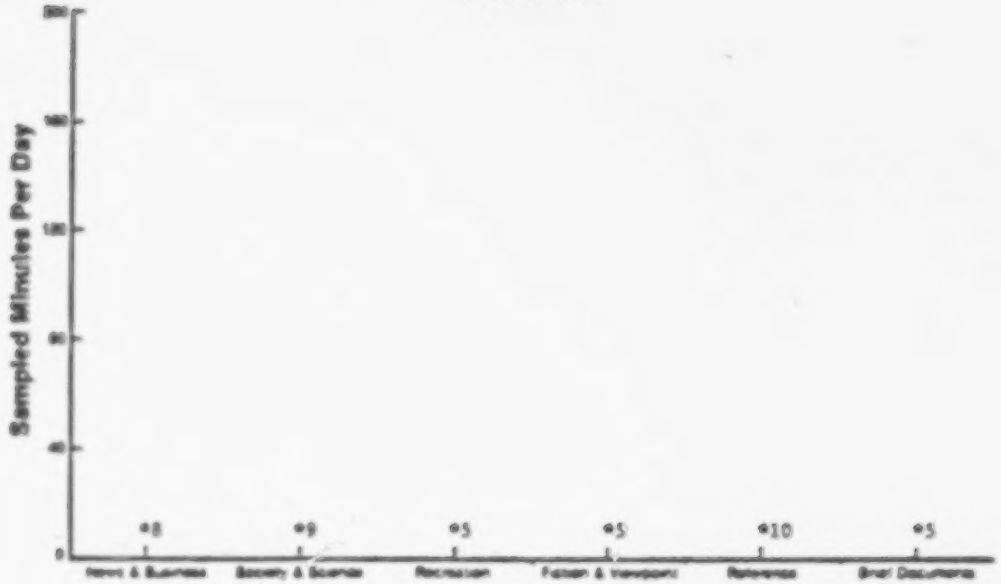


Note: The top figure shows sampled minutes per day read in each of the six content areas. The bottom figure shows sampled minutes per day read for each of the eleven uses selected by the reader. These sampled minutes per day represent, on average, approximately 70% of the total amount of time individuals reported reading per day.

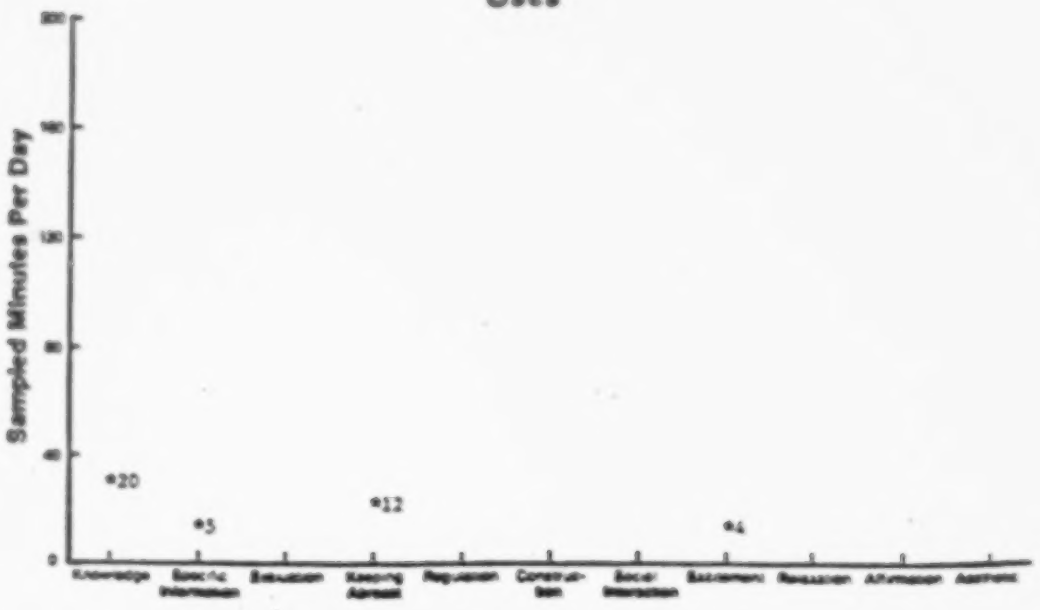
BEST COPY AVAILABLE

Profiles of Reading

Contents



Uses

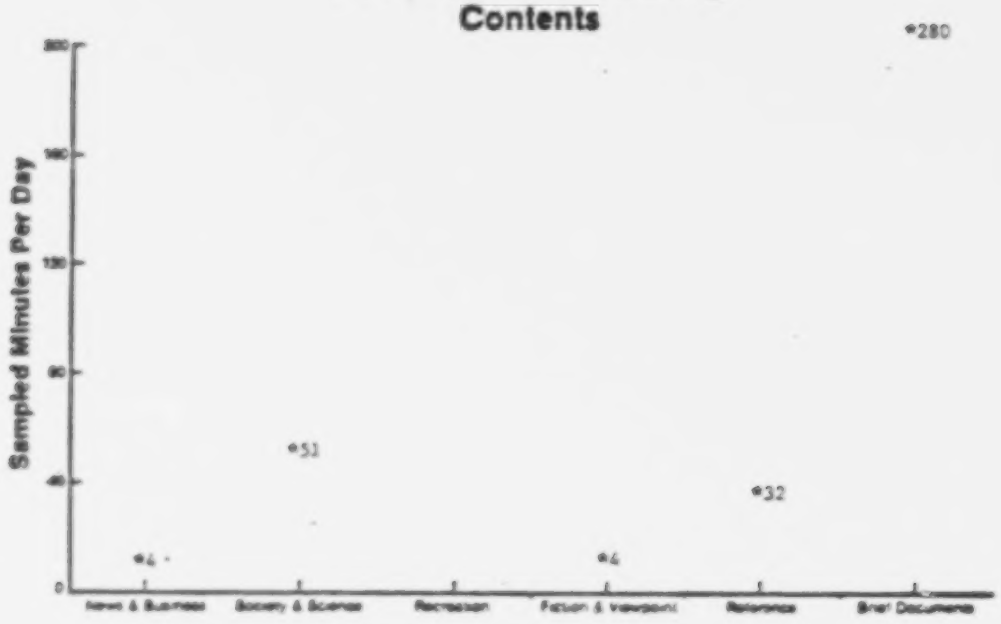


Note: The top figure shows sampled minutes per day read in each of the six content areas.
The bottom figure shows sampled minutes per day read for each of the eleven uses selected by the reader.
These sampled minutes per day represent, on average, approximately 70% of the total amount of time (minutes) reported reading per day.

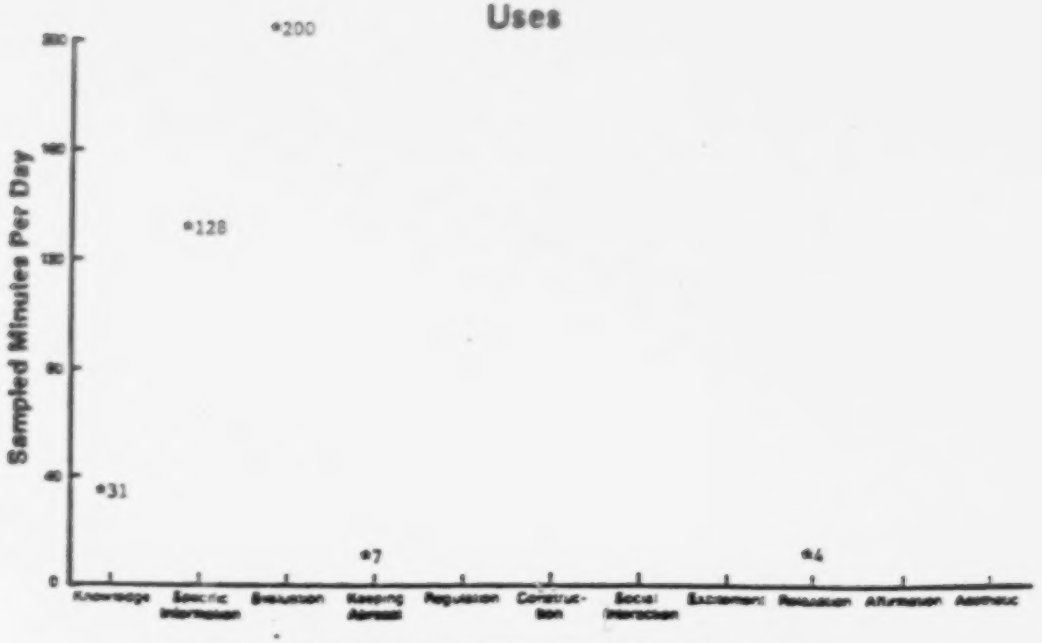
BEST COPY AVAILABLE

Profiles of Reading

Contents



Uses



Note: The top figure shows sampled minutes per day read in each of the six content areas. The bottom figure shows sampled minutes per day read for each of the eleven uses selected by the reader. These sampled minutes per day represent, on average, approximately 70% of the total amount of time individuals reported reading per day.

BEST COPY AVAILABLE